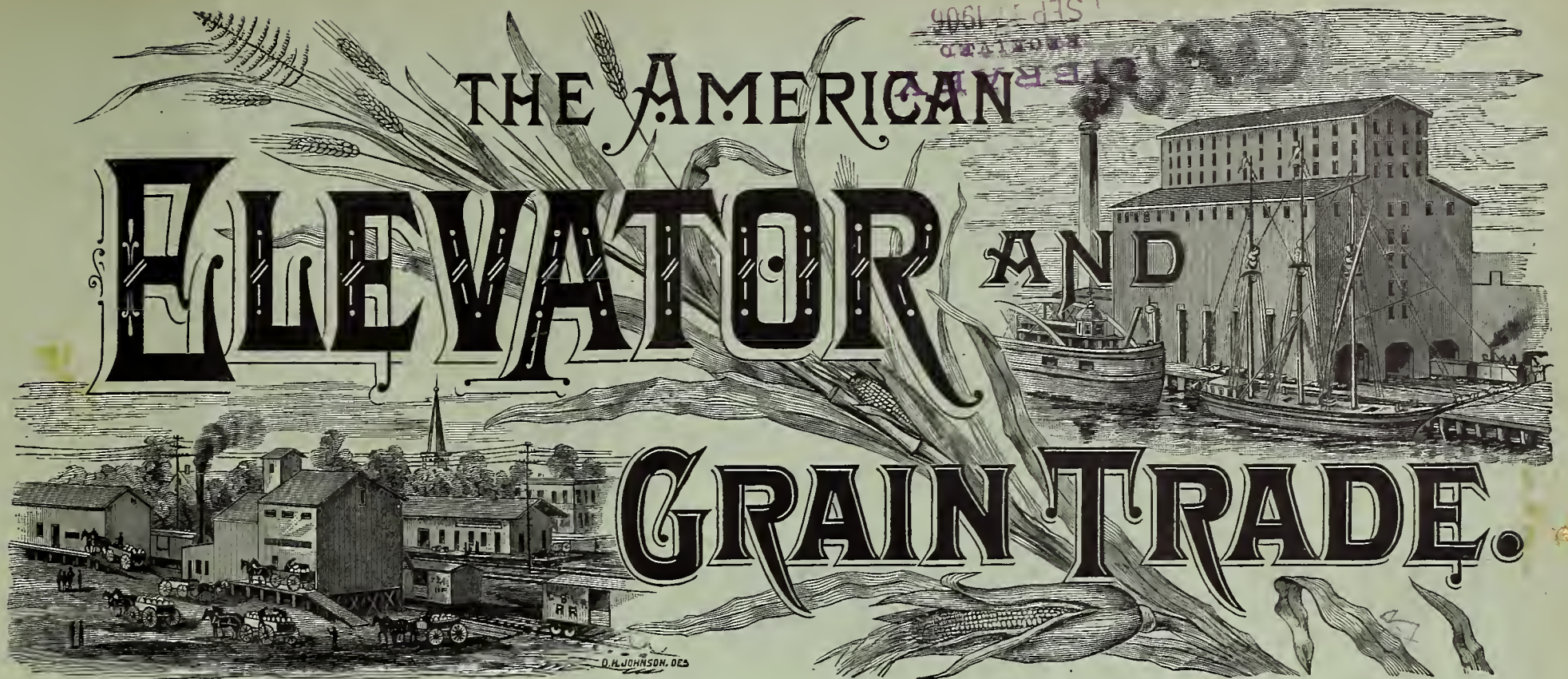


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Entered at the Post Office at Chicago, Ill., for transmission through the mails at second-class rates.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY  
(INCORPORATED).

VOL. XXV.

CHICAGO, ILLINOIS, SEPTEMBER 15, 1906.

No. 3. { ONE DOLLAR PER ANNUM,  
SINGLE COPY, TEN CENTS. }

DOES YOUR ELEVATOR  
NEED

**A CAR PULLER ?**

IF SO, SEND FOR OUR  
AUGUST BULLETIN

**"CONVEYING and TRANSMISSION"**

We make a Specialty of

Complete Grain Elevator Outfits

**Stephens-Adamson Mfg. Co.**

Chicago Office:  
First National Bank Bldg.

Main Office and Works:  
AURORA, ILL.

## BEST RESULTS

Can be attained only by using the best means. Our line of Elevator Buckets, Conveyor, Chains, Sprockets, Spouts and General Iron Work has brought "best results" in so many instances as to stamp them the most reliable and efficient to be had.

### The Northway Feed Mill

Still holds its place as the one that does the most and the best work at the minimum of expense. Built to do things and to last. Our prices save you money.

### THE STRONG-SCOTT MFG. COMPANY

Formerly Strong & Northway Mfg. Company

N. W. Agents for The Invincible Grain Cleaner Co., Richardson Automatic Scales, Alsop Process Co., Dufour Bolting Cloth and Knickerbocker Dust Collectors.

MINNEAPOLIS, MINN.



YOU NEED A

Muir Improved

**Friction Clutch  
Pulley**

Great power in small space; long life; ease of adjustment. We carry them in stock and guarantee every one. The only friction clutch for clipper and cleaner drives, because they can be adjusted while the shaft is running.

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We are originators and manufacturers of

### Cold Rolled Spiral Steel Conveyor

Made interchangeable with other kinds, but wears much better. Cold rolled—which means that the steel has not been softened in the furnace and dropped into shape. Costs no more than other kinds.



We make all kinds of MACHINERY FOR GRAIN ELEVATORS. We send Pinch Bars on trial. Our Sprocket Wheels and Chain are the best. We also make Pulleys, Shafting, Hangers, Car-loading Spouts, etc. Write for Catalogue.

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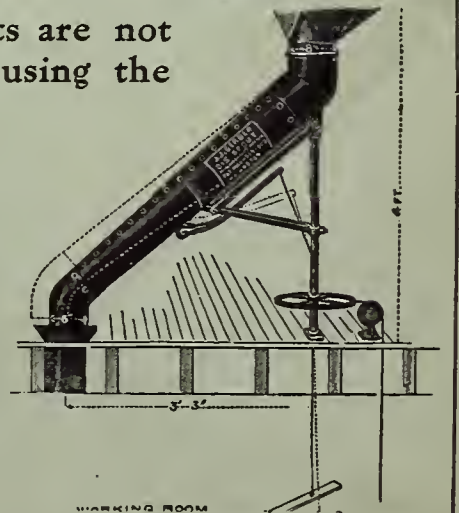
2705 N. Broadway  
St. Louis

If your distributing spouts are not satisfactory, you are not using the

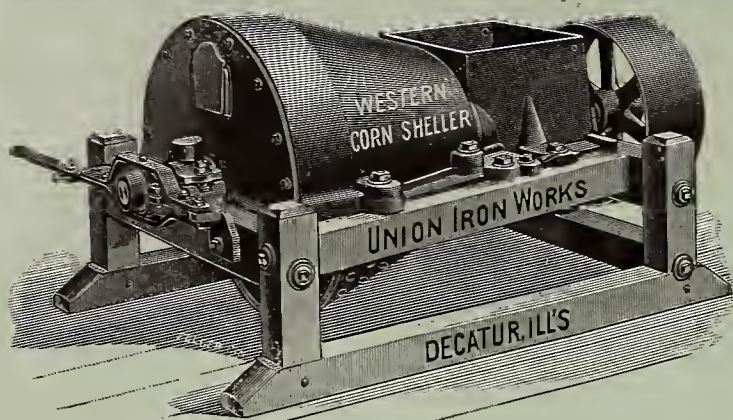
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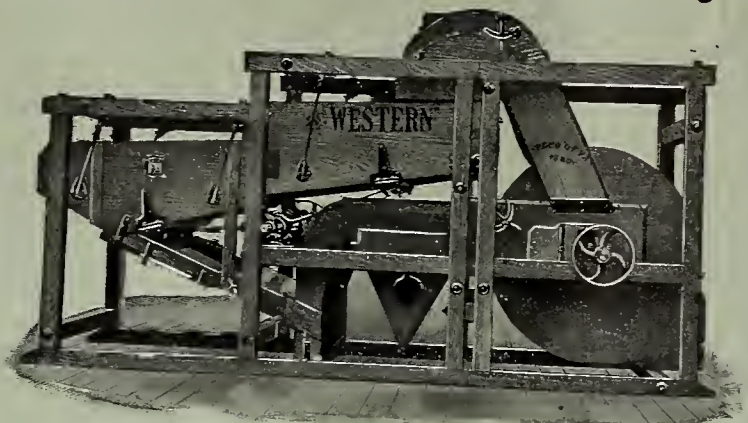
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Are You Building a New Elevator?  
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IF SO, EQUIP IT WITH

## "Western" Machinery

Plans furnished  
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"Western" Shaker Cleaner

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Show the value of any number of bushels or pounds of  
**WHEAT, RYE, OATS, CORN OR BARLEY**  
at any given price from 10 cents to \$2.00 per bushel.  
One of the most useful books ever offered to millers.  
Indorsed by prominent millers and grain dealers.  
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**\$1.25**

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Protect yourself against losses of grain  
by leakage in transit by using the

## Kennedy Patent Paper Car Liner

**EFFECTIVE—CHEAP**

Grain dealers are invited to investigate.  
Full description and price on application.

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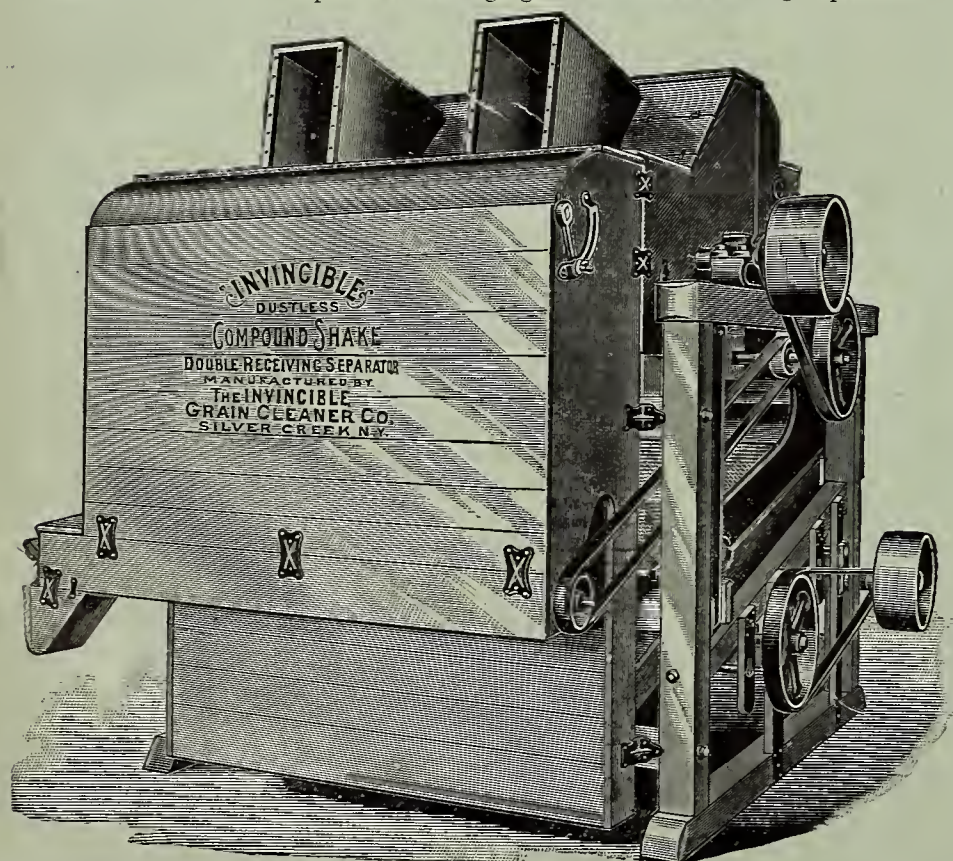
PATENTEE AND MANUFACTURER

SHELBYVILLE,

INDIANA

# GET THE BEST

The INVINCIBLE Compound shake HIGH-GRADE Separators.  
No shake, no tremble, run perfectly steady. Can be placed anywhere in the elevator.  
The INVINCIBLE Compound shake high-grade Double Receiving Separator.



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## Monarch Attrition Mills

Are sold on their merits and we are anxious that all prospective  
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mills will

## Make Good Anywhere

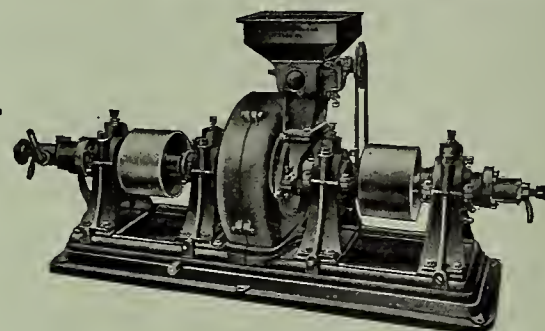
and invite comparisons with other makes. The feed grinding  
season is upon us and if you are going to take full advantage of the  
profits that are to be made in this business you must have a  
Monarch Attrition Mill.

The Monarch has phosphor-bronze interchangeable bearings; cable-  
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spring; special adjustable endless belt drives; hammered steel shaft-  
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mills. Write for new descriptive booklet and catalogue. We will  
send samples for comparison if you say so.

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Northwestern Branch:  
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# New Process Corn Shellers and Cleaners

SEND FOR  
CATALOGUES

STYLE F  
THREE SIZES



NEW PROCESS CYLINDER CORN SHELLER.

WITHOUT  
CLEANER

BLOMGRÉN BROS. & CO.

This Style at boot of elevator is used in connection with cleaner at head of elevator.

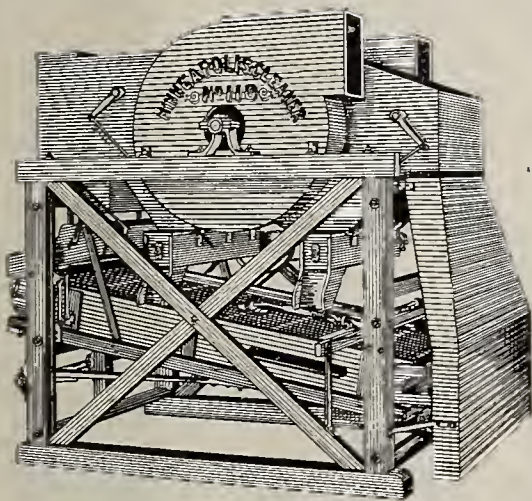
are standard the world over.

OUR WAREHOUSE STYLES for Grain Elevators or Mills are made in three sizes, either with or without cleaning apparatus, and in styles for handling either shucked or unshucked corn.

They require less space and power according to capacity, crack less corn, break cobs less, waste less corn, clean the corn more perfectly, clean the cobs in more merchantable condition for fuel than any other shellers in the world.

Machinery and Supplies  
of every kind for the grain man

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## COMBINATION CLEANER

GRAIN OR FLAX

2 MACHINES IN 1

By a unique device in the eccentrics we are enabled to produce two distinct throws and motions; thus we have in this machine a perfect grain cleaner as well as a flax cleaner, and the change can be made in five minutes' time, making it the most practical machine made. Has a large capacity in both grain and flax, yet simple and durable.

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(NOT KILL DRIED)

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**Macdonald Engineering Co.**

Sole Manufacturer

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## Fairbanks Automatic Scales

For Continuous, Uniform  
and Accurate Weighing  
of Grain.

**FAIRBANKS** Standard Track and Hopper  
Scales, used the world over.

## FAIRBANKS-MORSE

Gas, Gasoline or Oil Engines are cheaper than Steam,  
Burning Cobs as fuel. Require no attention after  
starting, thus dispensing with engineer

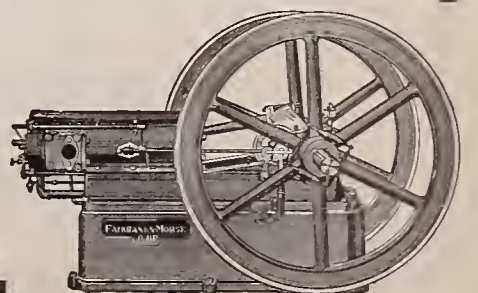
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Let Us Bid on Your Mill and Elevator Equipment.

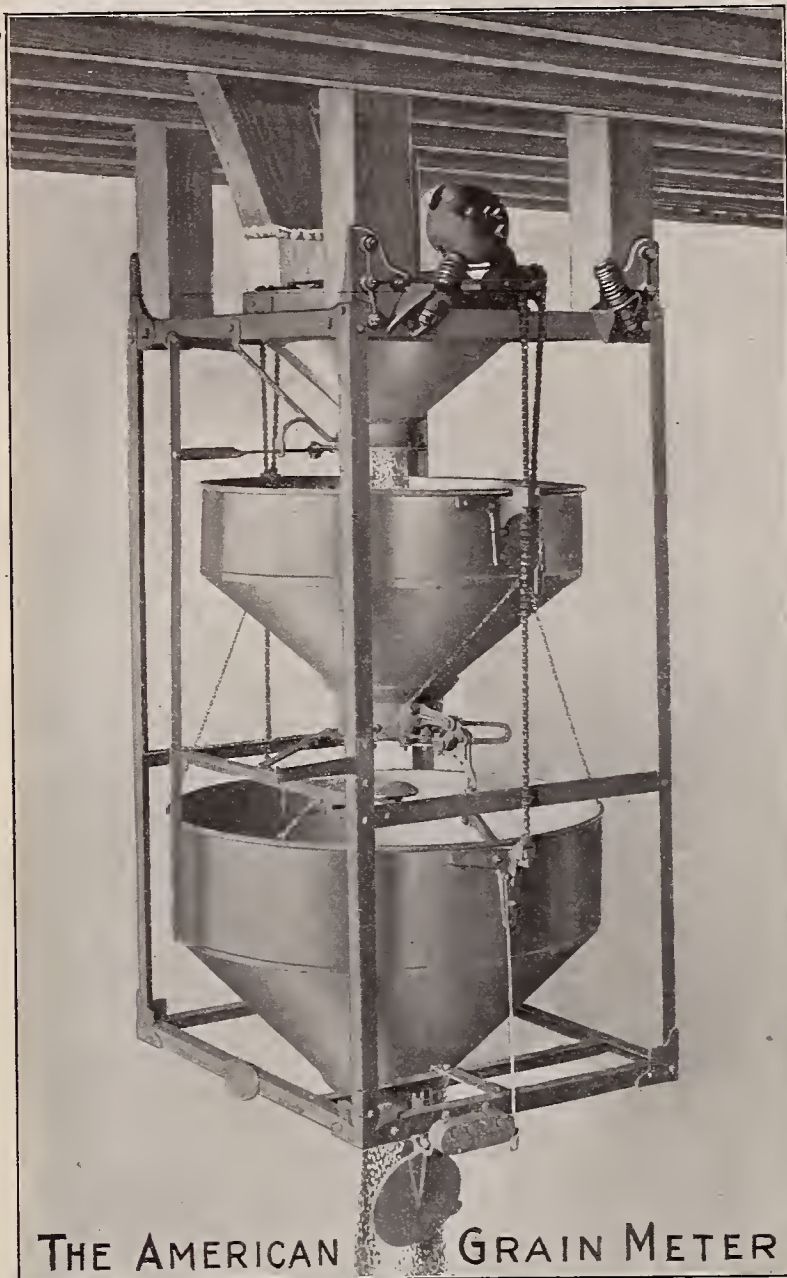
Send for Catalog N 544 G. R.

**FAIRBANKS,  
MORSE & CO.**

Monroe Street Chicago, Ill.







## Is the AMERICAN GRAIN METER Accurate?

### AFFIDAVIT

State of Ohio, } ss.  
Champaign Co., }

AMERICAN GRAIN METER  
VS.  
R. R. TRACK SCALES

We, the undersigned, hereby certify that on June 15th and 16th, 1906, we weighed the corn loaded into Erie cars No. 71904 and No. 107097 at the elevator of J. L. Bowler, at Bowler'sville, Ohio.

The empty cars were first weighed on R. R. Track Scales, which had recently been tested. They were then loaded, the corn passing through an American Grain Meter, which automatically weighed and registered it. The loaded cars were then weighed.

The results were as follows:—

	Car No. 71904	Car No. 107097
Net weight, Track Scales—	50,400 lbs.	50,568 lbs.
Weight, American Grain Meter—	50,380 lbs.	50,630 lbs.

Variation - - - - 20 lbs. 62 lbs.

It rained on Car No. 107097 while it was being loaded and also on the track scales, which would reduce the variation of 62 lbs.

*J. H. Powers  
weighmaster for R. R. Payne & Wagon Co.  
J. L. Bowler.*

*Signed and sworn to before me this 16th day of June, 1906.*

*M. M. Rock Justice of the Peace  
In and for Champaign Co.*

**AMERICAN GRAIN METER** { ACCURATE  
RELIABLE  
PRACTICAL

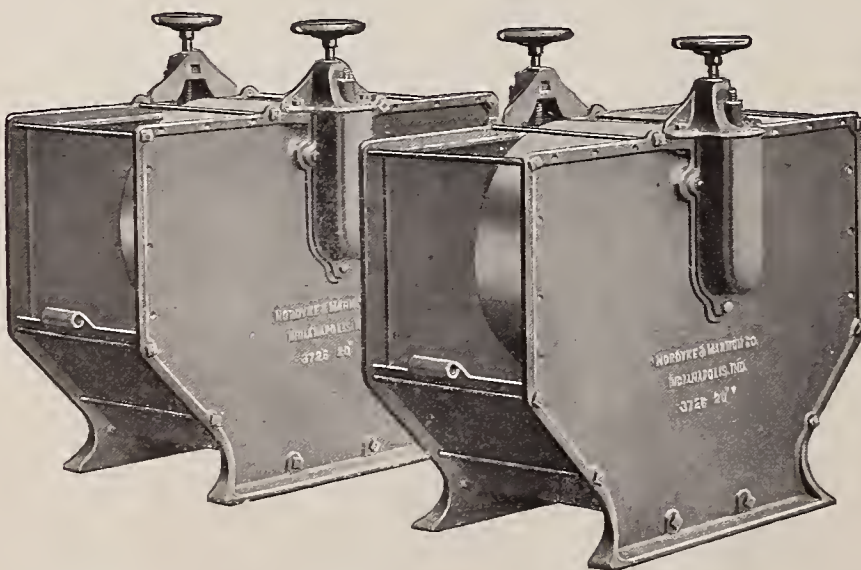
—Automatic Grain Weigher for the Country Elevators—

For further information address

**AMERICAN GRAIN METER CO.,** Springfield, Ohio

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You want first class Heads and Boots for your Elevator. We make them in iron and wood, and of all sizes.

You need Cups. We have a large department where Elevator Buckets are made in thousands.

We always carry a large stock of standard sizes and can fill orders promptly.

Our Buckets are well made of the very best materials and we supply many jobbers. You might as well buy direct from the factory of

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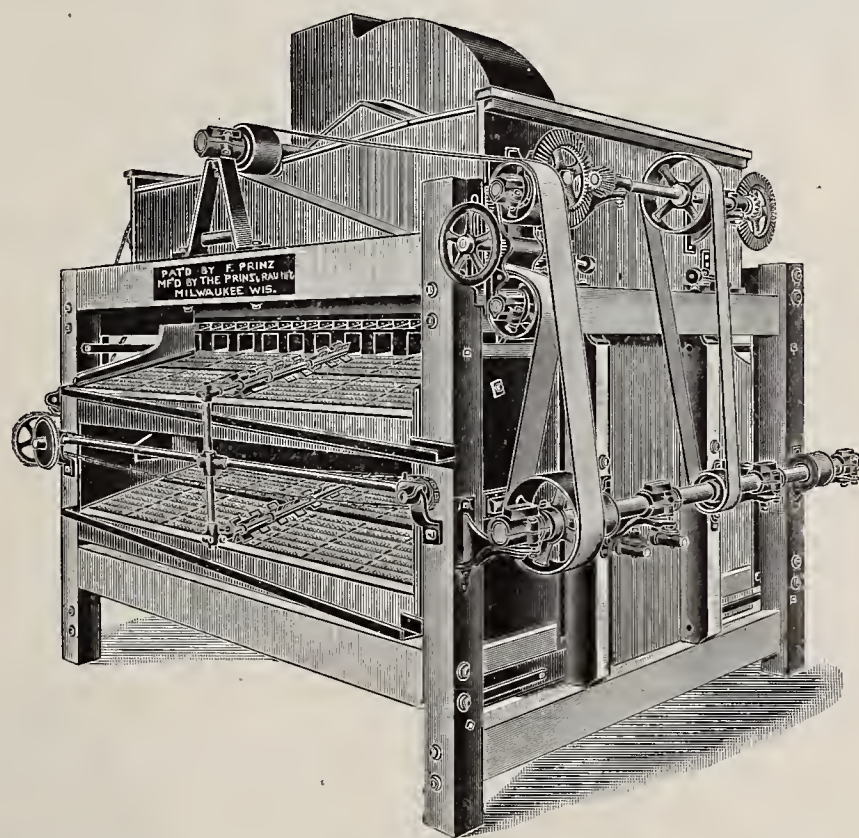
America's Leading Mill Builders

**INDIANAPOLIS, INDIANA**



# THE PRINZ IMPROVED AUTOMATIC SEPARATOR FOR WHEAT, OATS OR BARLEY

—○—  
LARGE  
CAPACITY  
—○—



—○—  
LIGHT  
RUNNING  
—○—

**THE ONLY SEPARATOR ON THE MARKET THAT MAKES  
PERFECT SEPARATIONS ALL THE TIME**

BECAUSE it has a roll feeder controlled by a sensitive feed gate, which distributes the grain evenly over the full width of sieve.

BECAUSE it has a patented sieve cleaner working on top of the sieves, and does not depend on irregular hand cleaning.

BECAUSE it has a wide sieve with a short travel, taking the fine seeds out at the head of each sieve.

BECAUSE the perforations in the sheet steel sieves do not increase in size by wearing as they do in zinc-covered sieves.

BECAUSE the machine is supplied with large, slow-running fans which make perfect air separations.

FOR FULL PARTICULARS IN REGARD TO PRICES AND CAPACITIES, ADDRESS

**The Prinz & Rau Manufacturing Co.**  
MILWAUKEE, WISCONSIN





## Improved Belt Conveyor

Carries all kinds of grain and mill products in package or bulk. Gradual, uniform curve of belt secured without complicated parts. Bearings thoroughly lubricated and have adjustment for taking up wear. Tripper substantial and reliable. Entire system economical and satisfactory—nothing to get out of order.

We manufacture a complete line of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for supplies.

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Chicago, Western Ave., 17th-18th Sts.

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Woodward, Wight & Co., Ltd., New Orleans, La.

## ELWOOD'S GRAIN TABLES

Show the value of any number of bushels or pounds of **WHEAT, RYE, OATS, CORN OR BARLEY** at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price.

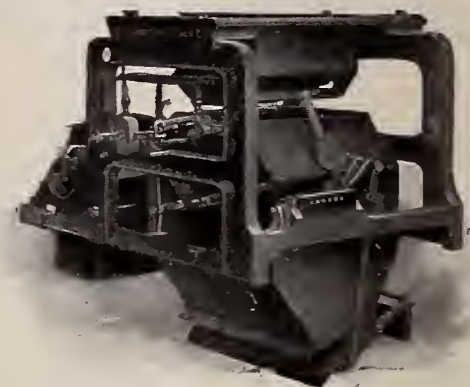
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Nothing! unless it's synonymous with SUCCESS in a particular line.

We are the original inventors of IMPROVED AUTOMATIC WEIGHING MACHINERY, with an experience of fifteen years; THEREFORE the name "RICHARDSON" is pre-eminent in AUTOMATIC WEIGHING.



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If you buy the "BEST" scale your competitor cannot get a better one.

DO IT! IT'S GOOD BUSINESS FOR YOU.

**RICHARDSON SCALE CO.**

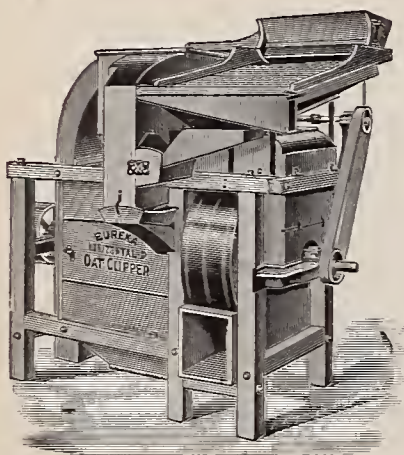
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New York, N. Y.

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## THE "Eureka" Oat Clipper



Is the most efficient, economical and serviceable machine, clipping and cleaning without waste.

Two strong, controllable air separations. Perfect ventilation of the clipping cylinder. Adjustable Beaters. Light or heavy oats clipped uniformly.

Strongest, best built and most durable. Every machine sold on a strong guarantee. Investigate our claims before buying.

machine sold on a strong guarantee. Investigate our claims before buying.

**THE S. HOWES CO.**

"Eureka" Works,

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ESTABLISHED 1856



## ELEVATOR-FACTS

"Rubber belting taken up twelve (12) times

**LEVIATHAN TWICE"**

SEND FOR "FACTS."

**MAIN BELTING COMPANY**

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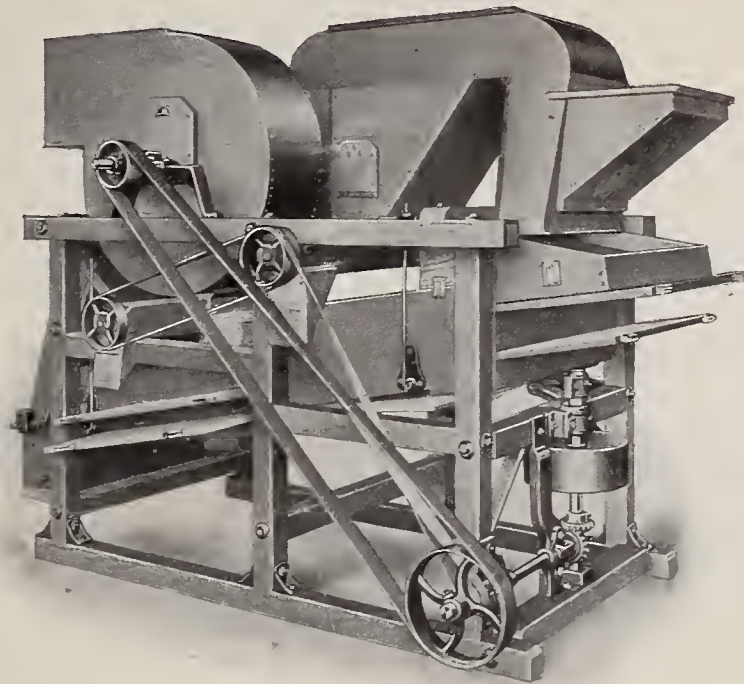
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BUFFALO, 40 Pearl St.

NEW YORK, 309 Broadway



## *The* Beall Rotating Receiving Separator



The easy rotating motion of this separator is so much superior to the straight shake motion, used in other separators, that anyone who sees the two motions side by side will buy the "Beall" at once. The easy rotating motion gives the screens great capacity, enables the machine to run light and without shaking or jarring, and gives the operator a chance to do something else than stand over it with a wrench and oil can.

*Actual results prove all claims  
we make for it*

Write for prices

The Beall Improvements Co.  
Decatur, Ill.

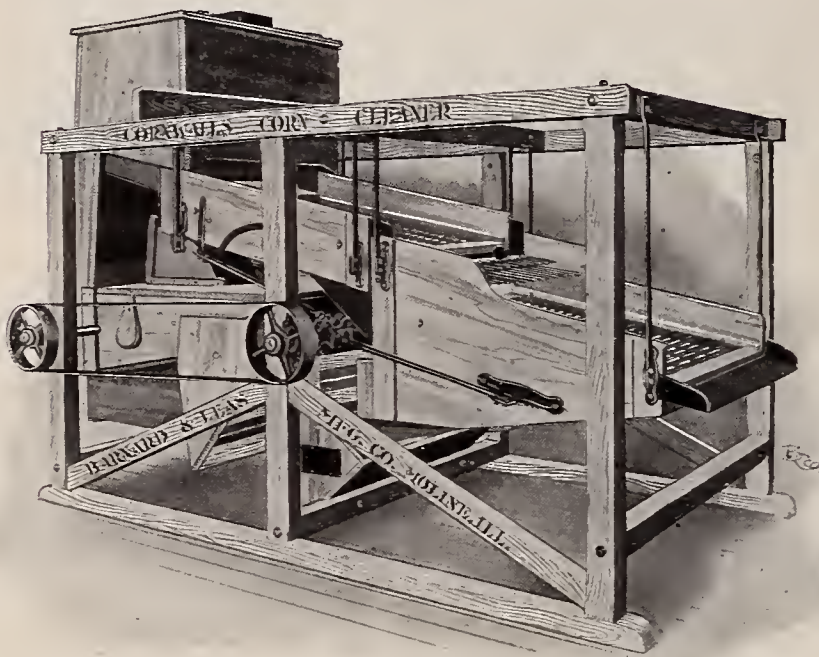


# Barnard & Leas Mfg. Co.

## Corn Shellers and Cleaners

The corn crop is reported to be in good condition and promises to be a record breaker.

To handle this crop to best advantage you will need a



**VICTOR  
CORN SHELLER**

and a

**CORNWALL  
CORN CLEANER**

Both machines are standard and leaders of their class.

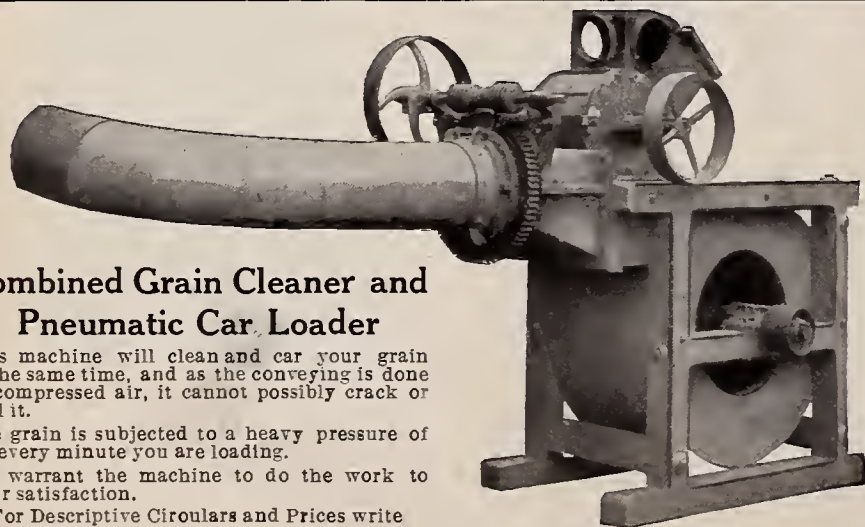
For efficiency, capacity, strength and durability they have no equal.

They possess valuable features possessed by no other shellers and cleaners. Send for latest circular and learn their good points.

# MOLINE



# ILLINOIS



### Combined Grain Cleaner and Pneumatic Car Loader

This machine will clean and car your grain at the same time, and as the conveying is done by compressed air, it cannot possibly crack or mill it.

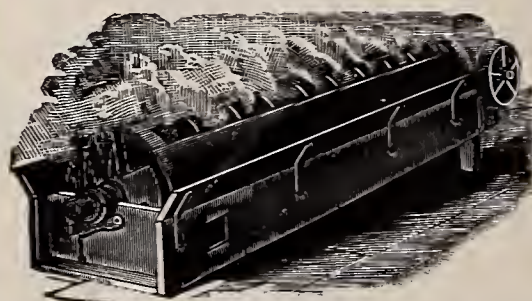
The grain is subjected to a heavy pressure of air every minute you are loading.

We warrant the machine to do the work to your satisfaction.

For Descriptive Circulars and Prices write

**Mattoon Grain Conveyor Co., - Mattoon, Ill.**

### WHY NOT USE THE ORIGINAL CUTLER STEAM DRYER,



Which is also a successful

Wheat Heater or Temperer  
or Dryer for Washed  
Wheat or Bran.

It leaves the Wheat in Perfect Condition for the Rolls. Will also dry  
Malster's, Brewer's and Distiller's Wet Grain.

Not an Experiment. In successful use 25 years drying  
CORN MEAL AND HOMINY.

BREWERS' GRITS AND MEAL,

BUCKWHEAT, RICE AND

ALL CEREAL PRODUCTS.

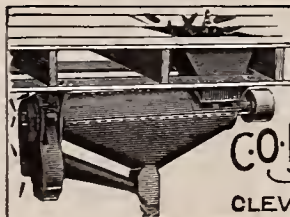
ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!

Automatic in operation, requiring no attention. Double  
the capacity of any other Dryer sold for same price.

**THE CUTLER CO., North Wilbraham, Mass.**



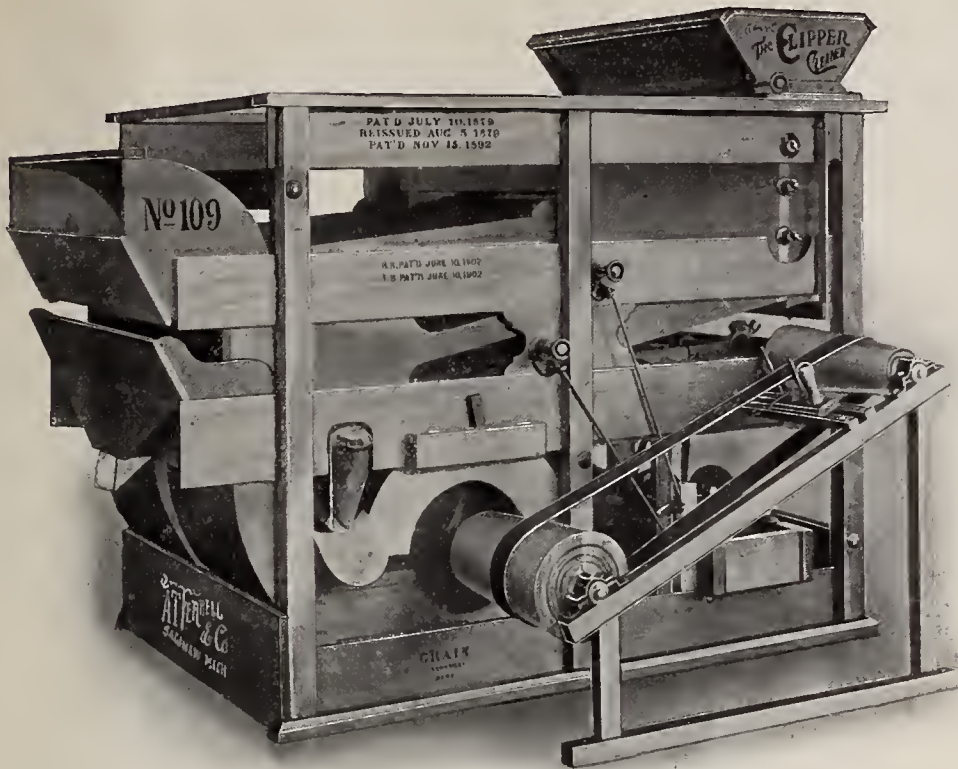
Minster Machine Co., Minster, Ohio, Mfrs.  
of Friction Clutches, Pulleys, Cut-off Couplings  
and Power Transmission Appliances.



**TRIUMPH  
POWER  
CORN SHELLER  
CO. BARTLETT  
& CO.  
CLEVELAND O.**



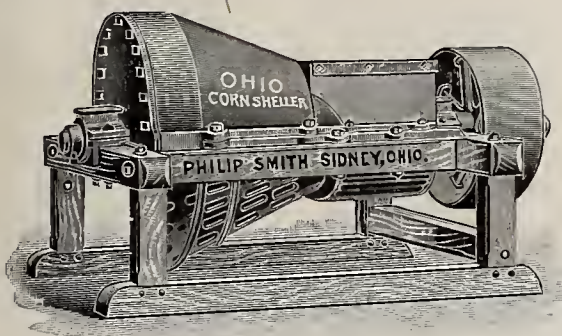
# Ten Reasons Why You Need a "Clipper" Cleaner



1. It is made by a reliable firm that has been in the Seed and Grain Cleaner business for years, and sold on merit.
2. We guarantee it to give you perfect satisfaction and allow thirty days for trial before paying for it.
3. It cleans all kinds of grain, seeds or beans perfectly.
4. It will clean more grain with less power than any machine made.
5. It is simple, strong, convenient and will not get out of order.
6. It requires less labor to keep it running than other machines.
7. It is quickly and easily installed by any carpenter.
8. It has stood the test of time and its sale increases each year.
9. It is the only successful combination cleaner on the market.
10. It will make and save you money in original cost, power required and the fine quality of work you can do with it.

We would be glad to mail you a catalog and give full particulars concerning any machine you may need.

## A. T. Ferrell & Co. Saginaw, W. S., Mich.



Corn Shellers

Corn Cleaners

Drags, Dumps, Etc.

When you want any machinery  
or supplies for your elevator,  
write us for prices :: :: ::

**THE PHILIP SMITH CO.**  
SIDNEY, OHIO

## THE WEST LEADS IN EVERYTHING

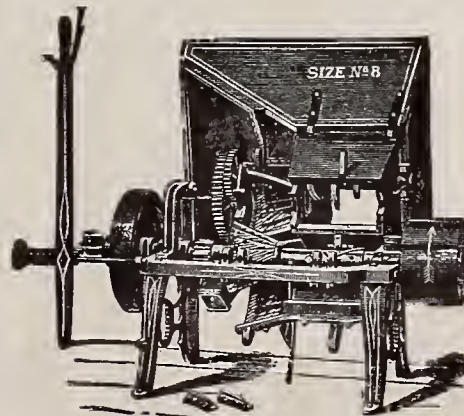
Western people are continually working to make things "just a little bit better." They hustle day in and day out, keeping their business methods strictly up to date. That's why they keep ahead.

For more than thirty years it has been our policy to build and equip grain elevators, "a whole lot better" than the other fellow, and we have done it. That's why we have so many satisfied patrons. Are you one? If not, get in line to-day by sending us your specifications.

**GREAT WESTERN MFG. CO.**  
LEAVENWORTH, KANSAS

## Bowsher's All-Around Feed Mill

(Sold with or without sacking elevator)



It CRUSHES ear corn (with or without shucks) and GRINDS *all kinds* small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.

Drive pulley overhung. Belt to it from any direction.  
Makes complete independent outfit.

**THE N. P. BOWSHER CO., South Bend, Ind.**



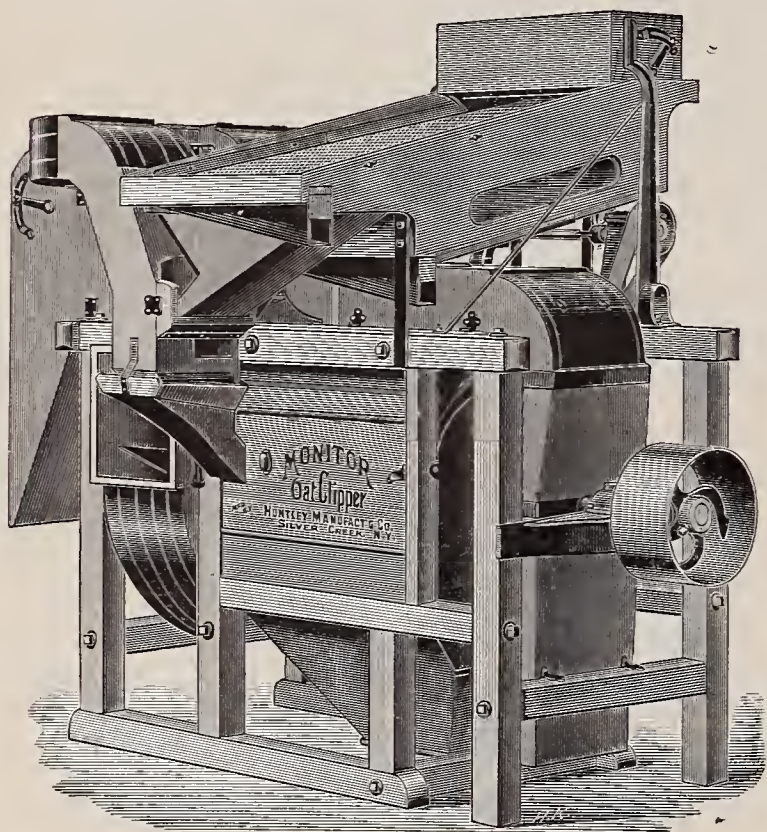
# A COMPLETE OUTFIT

For Any Modern Elevator, and Without Which no Elevator Equipment is Complete

SUPERBLY BUILT MACHINES THAT HAVE STOOD THE HARDEST KINDS OF PRACTICAL TESTS. READ THESE BRIEF SPECIFICATIONS AND WRITE US CONCERNING THESE MACHINES; CATALOGUE SENT ON APPLICATION

## Monitor Compound Shake Warehouse Separator

Especially designed and built for warehousing or receiving purposes. Provided with the well-known Monitor screen and air separations. Its construction guarantees the positive elimination of all jarring and shaking, the shoe being perfectly counterbalanced. Divided lengthwise, making two distinct shoes working on separate eccentrics. Perfect balance attained. Send for circulars.



## Monitor Dustless Oat Clipper

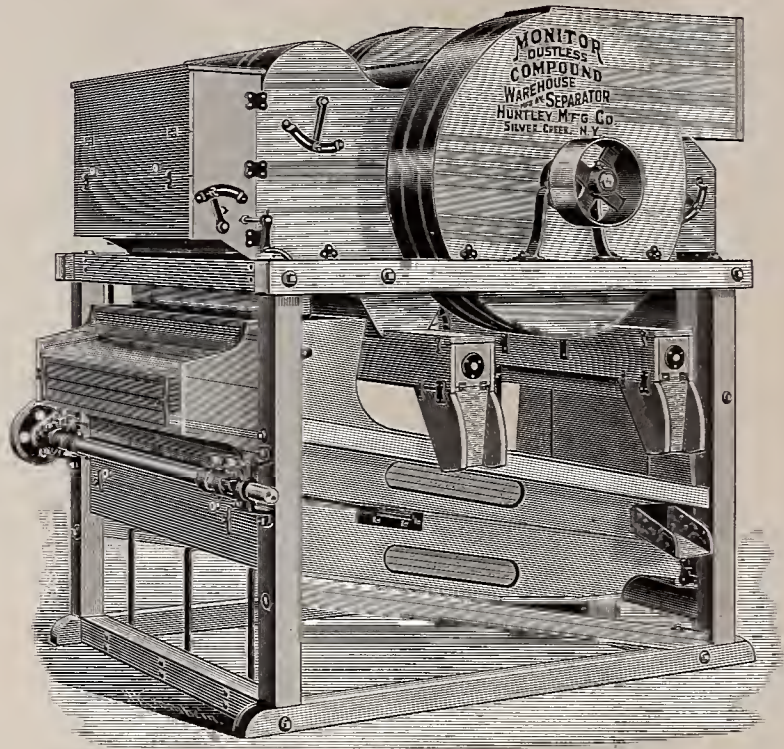
Clipped oats are in constantly increasing demand and command a higher price than those not subjected to this operation. Profits are greatly augmented when this machine is used, as it accomplishes the work easily, rapidly and entirely without waste. Case is made of hardened iron, cast upon chills, insuring the maximum of durability. Send for descriptive circulars.

# HUNTLEY MFG. CO.

SILVER CREEK, NEW YORK

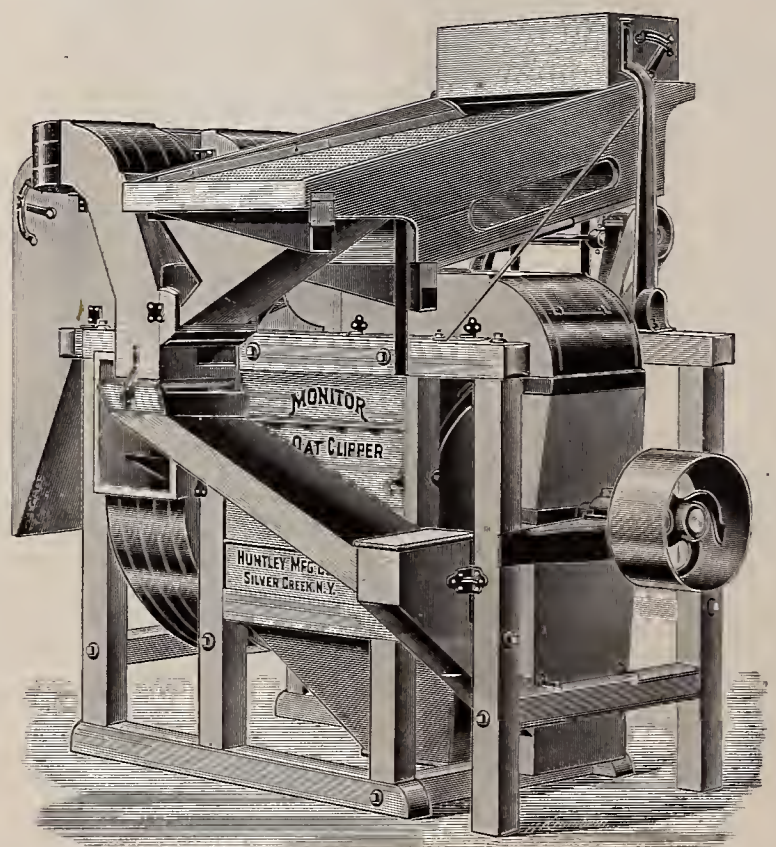
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 Berger, Carter Co., Pacific Coast Agents, Mississippi and 17th Sts., San Francisco, Cal.

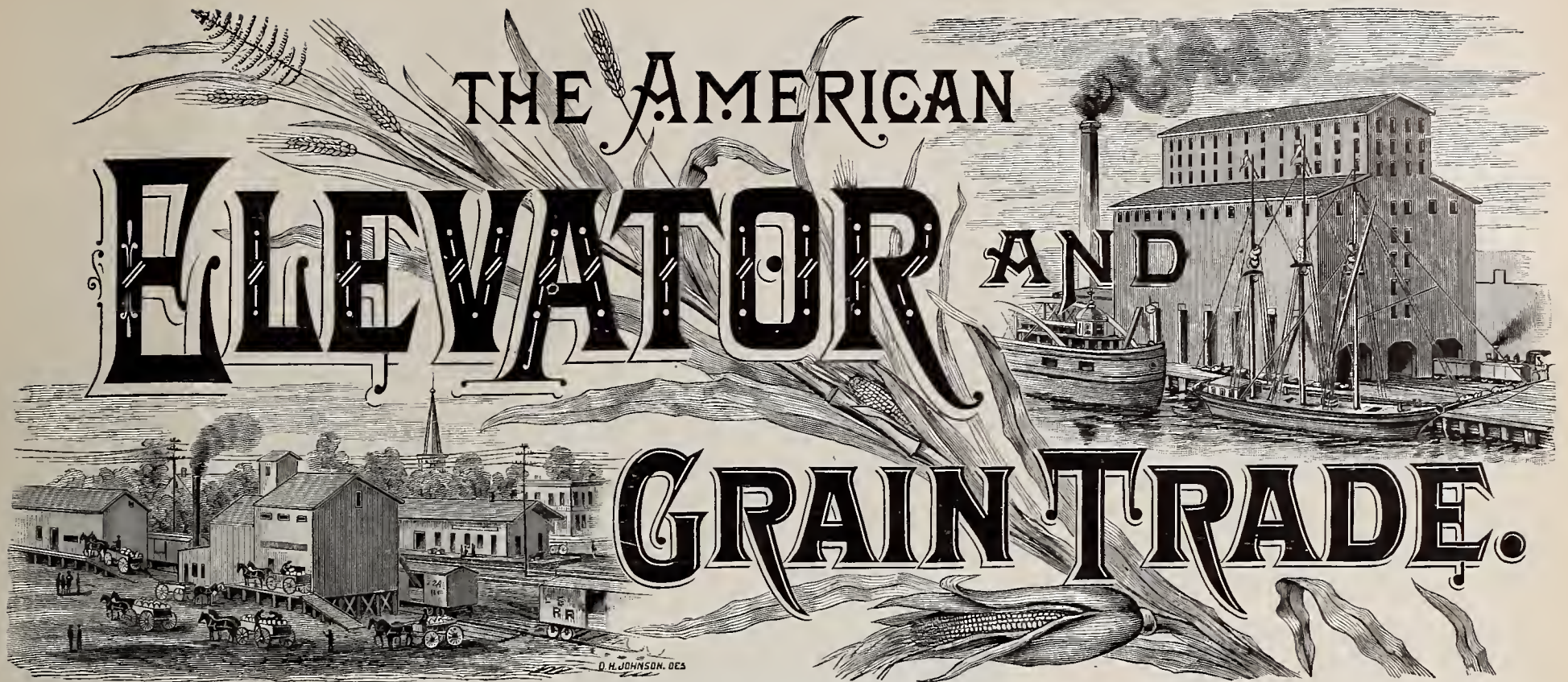


## Monitor Combination Oat Cleaner, Clipper and Scourer

One of the most useful machines made. Has carry-by spout. May be used for clipping oats, handling off-grade and smutty wheat. The by-pass spout can be used when the screen and air separations are desired without the scouring or clipping cylinder. Strongest possible construction. Send for circulars.







A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
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Vol. XXV.

CHICAGO, ILLINOIS, SEPTEMBER 15, 1906.

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SINGLE COPY, TEN CENTS.

### ELEVATOR FACILITIES AT BALTIMORE.

On August 20 the managers of the elevators of the B. & O. and Pennsylvania railroad systems posted notices at the Baltimore Chamber of Commerce that neither of the said roads would receive grain consigned to the elevator at Camden Station or to the Northern Central Elevator No. 2. These are known in the trade as the "option" elevators, to distinguish them from the elevators at Locust Point and at Canton, which are designated as export elevators.

The notices created an immediate protest and on the same day a special meeting of the dealers who use the elevators and who, in large measure, serve the local trade with corn and oats, was held at the Chamber of Commerce. Walter Kirwan presided. Messrs. Charles Kendig, of the Central Elevator Company, and George Brown, superintendent of the Baltimore & Ohio elevators, were present. The managers of the elevators were told plainly that their companies were not doing Baltimore justice in the matter, and that it was time the grain trade of the city was given more consideration by the railroads in its efforts to expand and so increase the commercial importance and the material welfare of the city.

As an outcome of the meeting a committee of five was named to agitate the matter and to urge prompt recognition of the needs of the city for increased terminal facilities. The committee consists of Walter Kirwan, John M. Frisch, Joseph C. Legg, James A. Loane and John J. Snyder. The committee was instructed to confer and co-operate with the regular standing committee of the Chamber of Commerce on terminals to see if some remedy could not be devised for the existing conditions and to help those who serve the uptown grain trade. The committee was instructed to pre-

pare resolutions stating its desires in the matter and to have them endorsed by the Chamber of Commerce for submission to the railroad officials.

The Iowa Corn Growers' Association has added another trophy to the long list of awards to be

### FINELY EQUIPPED TRANSFER ELEVATOR AT MCGREGOR, IA.

Milling wheat does not come from the field ready for the stones or the rolls; nor does grain arrive from farmers ready for consumption. It must undergo a separating, cleaning or drying process, as the case may be; so we have transfer houses dotting the landscape in various parts of the country; and one of these is shown in the illustration.

The house is owned by Chas. R. Lull of Milwaukee, Wis., one of the well-known grain merchants of that market, and was purchased by him from the Chicago, Milwaukee & St. Paul Railroad about two years ago. He remodeled it throughout, installing new machinery where necessary; and it is now one of the best transfer elevators in the West.

The elevator is built of wood, covered with iron siding. It has a storage capacity of 150,000 bushels and handling capacity of 30 cars of grain daily. Situated on the Mississippi River as well as the St. Paul Railroad, it has a marine leg equipment, but the latter has not been used since its new ownership. This marine leg has a capacity of 8,000 bushels per hour. The elevating machinery consists of seven legs, of which two have capacity of 8,000 bushels per hour; two, 4,000 bushels per hour, and one, 2,000 bushels per hour.

The elevator has an equipment of full line of grain cleaning machinery and two 80-ton check-beam track scales. The machinery is driven by a 150-horsepower engine

located in a brick engine house. The large part of the grain handled at the houses comes from Iowa, South Dakota and Kansas.

James H. Warren, supervisor of the Department of Weights for the St. Louis Merchants' Exchange, has resigned his position to accept a similar one at Baltimore. He will be succeeded September 15 by



CHARLES R. LULL'S TRANSFER ELEVATOR AT MCGREGOR, IOWA.

competed for at the coming January contest at Ames. Three years ago Hon. W. C. Whiting of Whiting, Iowa, founded a beautiful trophy at a cost of \$450, which is annually competed for in the ten-year sweepstake class. This year Mr. George M. Alle of Newel, in honor of his father, who is a veteran corn grower, has offered a prize of \$100 for the largest single ear of corn.



Henry McGee, at present manager of the Southern Elevator, formerly manager of the Union Elevator, and before that connected with the Burlington Elevator.

[For the "American Elevator and Grain Trade."]

## UNIFORM INSPECTION OF GRAIN. II.

BY L. C. BREED.

Uniformity with respect to the inspection of grain throughout the United States is very generally admitted to be desirable.

The grading for domestic and for foreign trade should be the same.

There are but two ways in which this matter of uniform grades can be brought about: 1. For the various states to allow inspection to be controlled by the exchanges and for the exchanges to adopt uniform rules. 2. Through supervision by the general government. In this connection, it is to be noted that Congress has authorized the establishment of laboratories for the inspection of export grain.

Some markets labor under the disadvantage of having two sets of inspection, viz., St. Louis and Kansas City, owing to their geographical position. Other markets suffer from disputed jurisdiction relative to the status of the authority of inspectors, viz.: Minnesota and Wisconsin.

Foreigners have recently complained vigorously concerning the grading of grain at certain ports, viz.: Newport News and Norfolk.

There is a steady though slow approach towards uniformity. Grain men who have been in the business, say, twenty-five years are aware of this fact.

There should be but three grades, to wit, extra (to be sold by sample), merchantable and unmerchantable.

If an inspector's grading is disputed (since no man's judgment is infallible), a competent committee should be allowed to pass on it.

Evasion of the law governing inspection should be punished as felony. This to apply both to the party asking it and the party granting it.

All public elevators should be open to the personal inspection of the directors of the exchanges during business hours.

Standards should be adopted each crop year, and type samples thereof kept open for the examination of interested parties.

In the next issue of the "American Elevator and Grain Trade," the writer will give his reasons in support of the above mentioned propositions. In every trade there are a large number of "kickers" and a limited number of "suggesters." Really, on most exchanges there are five classes: 1. Those who will take up with a proposed change and support it. 2. Those who are opposed to the change and will fight it. 3. Those who are on the fence. 4. Those who wish to modify the original proposition. 5. Those who will not bother themselves with the consideration of the matter at all.

Referring to legislation, it is unfortunate that if a certain class constitutes a majority of the members of a legislature, measures in the interest of that class are pretty certain to be received with favor. Anent this matter is the great popularity in agricultural states of the passage of laws regulating the sale of cattle feed. It is not so much, however, the regulation of the sale of feedstuffs as the wide variations in the methods and requirements in different states, which works a hardship on manufacturers and dealers; and this is reprehensible along the same lines as state inspection of grain.

Furthermore, lawyers should not be eligible to make laws, because they are not business men. Neither should business men write laws, since they do not know law. The proper way would be to work in conjunction with each other.

Ideal conditions never have existed and never will exist. The only thing to be hoped and striven for is the accomplishment of the greatest good to the greatest number.

## SHANAHAN RESIGNS TO GO INTO THE GOVERNMENT SERVICE.

On Wednesday, September 5, John D. Shanahan, chief grain inspector and weighmaster for the Corn Exchange of Buffalo, sent to the officers of that body the following communication, which will explain itself:

That "the prophet is not without honor save in his own country" has again been exemplified in that the Honorable James Wilson, secretary of the United States Department of Agriculture, has appointed me as assistant to the chief of the bureau of Plant Industry, Mr. B. T. Galloway, of that department, which position comes to me entirely unsolicited and unsought, and is something I had not thought of up to six weeks ago.

I have accepted the position, and I, therefore, herewith tender my resignation as chief grain inspector and weighmaster, and beg you to accept same, to take effect on September 30, next. In doing this, I take this opportunity to extend to each and every member of the grain trade of Buffalo, during the past twenty years, my most sincere and heartfelt thanks for the uniform courtesy, kindness and patience they have shown me during my connection with it.

I am anxious they should know that I thoroughly appreciate the opportunities they have placed at



JOHN D. SHANAHAN, BUFFALO, N. Y.

my disposal, whereby I have been enabled to travel and study the different phases of the art that I have followed so long, and to beg them to believe that I have always had but one object in view in all my work, and that to be perfectly square with everyone, and if I have failed in this, or in other ways, I feel very confident that you will throw around my shortcomings the broad mantle of charity and friendship as you have always done toward

Your humble servant,

JOHN D. SHANAHAN.

Mr. Shanahan, as he says, has been connected with the Buffalo grain inspection department as an employe for nearly twenty years. Born in Buffalo on October 24, 1864, he entered this service when directed by the old Buffalo Merchants' Exchange, on March 17, 1887, as helper on track, and has been connected with the service uninterruptedly ever since, while its control has passed successively to the Chamber of Commerce and the Corn Exchange. He was made chief inspector on January 1, 1898, and chief weighmaster in 1902. In 1904 he was appointed chief deputy inspector of the New York Produce Exchange for Buffalo and on July 20, 1905, was appointed a member of the Wisconsin Grain and Warehouse Commission, to represent the East. Having organized that body and systematized its work, he resigned on April 15, 1906.

Mr. Shanahan's appointment to the Washington duty was no doubt the result of his advocacy of uniform grading of grain upon United States standards, and while the nature of his work has not

yet been made public in detail, it will, of course, be in connection with the new grain examination laboratories to be established by the government at the ex-ports for grain.

## ELEVATORS IN IOWA.

N. S. Ketchum, a member of the Iowa Railroad Commission, after an investigation of the elevator and railway facilities of northern and northwestern Iowa, is of the opinion that these facilities are inadequate. Mr. Ketchum is reported at Des Moines to have found that the railroad companies have often refused to grant sites for new elevators in towns already well supplied with elevators. One instance is cited where there were three or four houses with a total capacity of 30,000 to 40,000 bushels, but Mr. Ketchum thought there should be room for 150,000 bushels; so after much cogitation, he concludes that "the question of the shortage of cars throughout the northern part of the state is wholly traceable to this lack of elevator capacity. There are elevators sprinkled all over the northern part of the state that have a capacity of 10,000 bushels, which means, says a Des Moines newspaper, taking its cue from the Commissioner, that the grain production of a few farms fills the elevators, and after that it is a question practically of loading direct to the cars. Cities of southern Iowa corresponding in size to those of the northern part of the state where there is an elevator capacity of but 30,000 bushels, have an elevator capacity of 150,000 bushels and more, and from such cities there is no complaint of the shortage of cars.

"Commissioner Ketchum has called the attention of the management of every railroad that passes through the northern part of the state to this inadequate elevator capacity. Railroads now have a rule that no elevator can be erected that does not have a capacity of at least 25,000 bushels. Mr. Ketchum has recommended that all the old elevator owners be required to increase the capacity of their elevators to this minimum size.

"A number of railroad officials have already written to the Commission admitting the conditions and promising that in leasing ground for new elevators and in re-leasing sites for elevators already erected, the owners of such elevators will be required to increase the size to the minimum. Elevator men in the northern part of the state have been in the habit, as soon as their little elevators were filled and they could get no more grain, of complaining to the farmer that it was all the fault of the railroads for not furnishing cars. A further matter of consideration is the fact that an elevator can never be filled. When the oats bins are filled to running over, the corn bins are but partially filled and can be used for nothing but corn, and when the corn bins are filled the oats bins are but partially filled and no more corn can be received."

John W. Williams has resigned as grain inspector at Nashville, Tenn., after twenty-five years of continuous service; and is succeeded by J. T. Roberts of the Neil & Shafner Grain Co.

The rice acreage of Louisiana this year is the smallest for many years, but the rice crop will be the biggest money crop for farmers in the history of the state's rice belt's development.

"Patronize only regular board of trade firms," say King & Co., Toledo. "Select your broker with the same care as you would your family doctor. There are quacks everywhere. A big bucket-shop failed in New York this week for several millions. The financial backer merely laid down. They advertised as brokers, but were not members of any board. Place your orders with regular firms who have a reputation to protect. Then your orders will be executed where they will affect the price and thus promote your and the country's best interests. Boards of trade are like national banks—both are necessary to move the crops. There is the same difference between boards of trade and bucket-shops as there is between national and faro banks."



**ELEVATOR AT PORT COLBORNE.**

The Dominion government has awarded a contract to Peter Lyall & Sons of Montreal for the erection of a strictly modern grain elevator at Port Colborne, the Lake Erie entrance to the Welland Canal, the primary purpose of the elevator being to transfer grain from the big boats navigating Erie and the upper lakes to smaller vessels for forwarding to Montreal and below. The plans and specifications have been made by J. A. Jamieson, C. E., of Montreal, and call for a modern fireproof structure, to be built of steel and Portland cement concrete throughout and in such a manner that all steel will be either embedded in, or protected by, concrete.

The type of structure is to be the Jamieson patent elevator construction, all storage bins being rectangular in shape; in general, fourteen feet square and seventy-five feet deep, with a number sub-divided to form smaller bins; all interior bin walls are to be constructed of a series of steel plates, called "through plates," with "lock bar" horizontal joints, and supported by steel bin columns filled with concrete. This "through plate" beam system forms a wall of ample strength, without the assistance of the rods, to resist the horizontal pressure of the grain, while the bin columns carry all the vertical loads. The bin hopper bottoms and all exterior walls, including the bin and cupola walls, floors and roofs, are to be built of reinforced concrete. A special system of concrete finish is to be used, over both the exterior and interior, which, combined with the general design, will insure a good architectural finish and appearance, in contrast to the usual tank or barn-like elevator structures.

The mechanical equipment of this elevator will embody the latest ideas in grain handling appliances. All the machinery has been specially designed, and automatic machines and appliances that will increase the handling capacity and reduce the cost of operation will be installed. There will be four marine legs, giving a total elevating capacity of 80,000 bushels per hour, each leg having a double equipment of marine shovels, which will be operated by an electro-pneumatic control system. There will also be an equipment of automatic machines for cleaning up the vessel's floor. There will be nine elevator legs having an elevating capacity of 22,000 bushels per hour each, to receive the grain from the marine legs and also to concurrently load canal boats at the rate of 100,000 bushels per hour through special loading spouts which will distribute the grain in the vessel's hold without the aid of hand trimmers, thus making a large saving, both in time of loading and in the cost of labor.

All grain will be weighed, both into store and for shipment, by automatic weighing machines, which will entirely eliminate weighmen. This system of automatic weighing is an entirely new departure in public elevators on this continent, but the machines to be installed have been in use for the public weighing of grain in Great Britain and Europe for a number of years, and are accepted as the official weighing instrument by such a trade body as the Liverpool Corn Trade Association.

All parts of the machinery will be driven by individual electric motors having a total of 1,800 horsepower. The building will be lighted throughout with incandescent electric lights so that it may be operated both day and night, as may be required to give prompt despatch in discharging or loading vessels.

"In preparing the plans and specifications for this elevator, full considerations have been given to the most prominent features which make for commercial success in the age of close competition, in which the cost of handling and transportation of material is such an important factor," says the Montreal Daily Herald. "By having a strictly fireproof building of ample strength in which valuable goods are to be stored, the risk of failure and cost of insurance is reduced to a minimum. By having

the very best mechanical equipment of large capacity, a large saving can be made in the cost of transportation by reducing the delay to vessels in port receiving or discharging their cargoes and at the same time generally reduce the operating cost of the elevator. It is believed that the saving in operating expenses will be fully 35 per cent, and that the saving in time to the vessels will be fully 50 per cent over any existing elevators."

**WILLIS F. JOHNSON.**

The retirement of Willis F. Johnson, head of the firm of W. F. Johnson & Co., Chicago, from active business on September 1, closes up the business of one of the older firms on the Chicago Board.

Mr. Johnson was born in Yates County, New York, in 1834, and moved to Palatine, Ill., in 1844. He started in the grain business at Morrison, Ill., in 1856, which he carried on extensively, including the handling of lumber and coal. A little later he bought the elevator at Sterling, which he operated in connection with his other house.

In 1873 he became a member of the Chicago



WILLIS F. JOHNSON, CHICAGO.

Board of Trade, and was a partner in the firm of S. H. McCrea & Co., which was organized to do a receiving business in grain in 1874. The partnership was dissolved in 1880, at which time he organized the firm of W. F. Johnson & Co., which continued to the present time.

The remaining partner, George A. Wegener, will continue the business, clearing through George H. Sidwell & Co., whose offices are at 742 Postal Telegraph Building.

**EXPORTS OF GRAIN IN SIX MONTHS.**

The following table shows the comparative exports of grain at five Atlantic ports and Gulf during the past six calendar months of 1904, 1905 and 1906, the figures including flour and meal, it being calculated that one barrel of flour is equal to  $4\frac{1}{2}$  bushels:

Seaports.	1904. Bushels.	1905. Bushels.	1906. Bushels.
Boston.....	12,653,273	14,289,358	20,194,356
New York.....	39,285,610	49,510,993	55,826,309
Philadelphia.....	12,725,912	11,299,144	20,899,129
Baltimore.....	14,057,662	13,594,334	29,244,307
New Orleans.....	8,067,960	22,392,986	21,282,189
Total, five ports.....	86,790,417	111,086,755	147,446,250

The development of a field corn that will ripen in the latitude of the Superior region of Michigan is the object of experiments being carried on at the state agricultural station at Chatham, Alger County, by Leo M. Geismar, superintendent of the farm. The results will be of much moment to the entire Lake Superior region. For some years Mr. Geismar has been on the lookout for farmers who have been successful in raising corn in the upper

peninsula, but few have been found. One variety of corn that has grown to maturity before the appearance of the frost has been raised by James R. Ryan and his father for the past thirty-six years on a small plot of ground at Sault Ste. Marie. Mr. Ryan, Sr., procured the seed corn with which he grew the first crop from an Indian, and it has been traced back sixty years in the upper peninsula. This can be depended on to mature. A very few other strains were found, but only the Ryan type is said to be dependable. It ripens early, but its stalk is comparatively short, and the number of ears to the stalk is small. Furthermore, the ears have but eight rows of corn. Now, the consideration is to evolve a corn that shall have all the hardness of the Ryan product and which shall have, in addition, a fourteen-row ear and a greater number of ears to the stalk. This is the problem on which Mr. Geismar is working at the experimental farm.

[For the "American Elevator and Grain Trade."]  
**SUPERVISION OF WEIGHTS AND  
 CONDITION OF CARS.**

BY C. C. MILES,  
 Chairman Committee on Weights and Measures, Peoria  
 Board of Trade.

The question of supervision of weights has been talked and written about so much that the average man grows a little tired of it and hardly takes time to read or hear just what there is to it. It is not my intention to go into the matter in a way that will be wearying, but simply to state in a few words some results that ought to be of value to the shipper of grain.

Within two years past, nearly every Western grain market of importance has created a bureau for the supervision of weighing and condition of cars when set for unloading or loading. The Peoria Board of Trade put into actual operation such a bureau on June 1. It is conducted under the direction of the committee on weights and measures. The force consists of a chief supervisor, whose duties are general; at least one assistant supervisor at each elevator and grain consuming industry in the city of Peoria (this does not include the Pekin distilleries nor Glucose Company's plant), whose duties include the careful examination of the physical condition of cars when set for unloading, with a view of determining beyond any possibility of doubt whether or not cars are properly sealed, whether in good or bad order, and whether or not actually leaking, also to see that all grain is taken from cars the condition of scales and actually seeing the grain weighed by a sworn Board of Trade weighmaster.

Certainly, every point that may be in the interest of the Western grain shipper and also the Eastern or Southern buyer is looked after with the greatest care. We know absolutely that the work being done by the Peoria bureau is well done. So far as the weighing is concerned, it is done correctly. Shortages, however, cannot always be charged to incorrect weighing. After sixty days' trial it has developed that A LARGE PROPORTION of cars unloaded were not in proper condition to be loaded with grain and A LARGE PROPORTION were actually leaking when set for unloading. The record for June and July is quite startling. Here it is:

Total cars supervised (unloaded).....	2,363
Reported in good condition.....	1,655
Reported leaking on account of bad order	524
Reported leaking at grain doors.....	137
Reported in bad order (not leaking).....	52
	2,368

These figures do not include cars improperly sealed, of which there were 276 with one or more seals missing. The record clearly shows that shippers loaded many cars not suitable for carrying grain safely to market. It suggests that the several railroads should send a fair proportion of their box cars to the repair shops. It should be a warning to the man who loads the grain to look out for cars with leaky sides and ends, for rotten or defective door posts, for holes



at the king bolt and near drawbars, for weak, decayed and insufficient grain door lumber; in short, to be as careful of his grain as he is of his dollars.

[For the "American Elevator and Grain Trade."]

## THE AMERICAN ELEVATOR AND GRAIN TRADE OF CHICAGO.

BY E. P. ARNOLD, C. E.

The American, or Chicago, grain elevator that was designed and constructed in Chicago some fifty years ago, and has since been copied in all parts of the world, on account of its immense storage capacity and the rapidity with which grain can be handled, cured and kept in condition by it, is the best type of building for the purpose on earth. The gravity grain elevator, of cribbed construction, with bins 60 feet to 80 feet above a high first floor; with the working floor and railroad tracks on the first floor under bins; with cupola high enough to give a gravity fall to garners and scales and to reach any bin in the elevator from spouts below the scales; with elevator legs enough to turn over the entire contents of the elevator, when full, in one or two days. This is the typical Chicago grain elevator.

A modern Chicago grain elevator, or storage warehouse, occupying less than an acre of ground on the bank of the Chicago River, with a capacity of 1,500,000 bushels, has from two to three railroad tracks running through the building, and eight or ten receiving elevator legs between the tracks, where cars are placed to be unloaded or loaded, and as many or more shipping legs as it has receiving elevators. Ten cars of grain to be unloaded are placed in front of the ten receiving elevators and hoppers; ten pairs of steam shovels are placed in the cars with a man at each shovel machine, and the ten cars will be unloaded, elevated, weighed and run into bins in fifteen minutes; or, if the switch engines keeps the elevator supplied with cars, switching on one track while the other track is being unloaded, forty cars per hour, or 400 cars in ten hours, can be unloaded. (An average of 800 bushels per car gives 320,000 bushels received per day.)

The shipping elevator legs, of which there are twelve on the shipping sides of the elevator, will each carry 6,000 bushels of grain per hour, and can deliver to a vessel at the dock 72,000 bushels per hour, provided there is plenty of grain in the elevator and provided it will run free aboard.

When the Prince of Wales came to this city, as a boy, he went to one of the old Munn & Scott elevators to see them load a vessel. A 30,000-bushel schooner was at the dock to be loaded. (A 30,000-bushel vessel was a large craft for those days); and he saw her loaded in one hour. The elevator foreman, with true Western pride, said to the future King Edward VII. of England: "Now, my boy, go home and tell your mother how quickly we can handle grain and load vessels in Chicago."

The grain storage business was a gold mine in the years prior to 1875. The storage charge per bushel was 2½ cents for the first ten days and half a cent for each additional ten days or fraction thereof. Grain elevators paid the cost of construction in a few months, as can be seen by the following figures: Cost of a 1,000,000-bushel elevator at 25 cents per bushel of capacity, \$250,000. It would receive from cars about 100,000 bushels per day, for which the charge for handling, on first storage at 2½ cents per bushel, would be \$2,500 per day. Add second storage on, say, 500,000 bushels at ½ cent for each ten days, equal \$250 per day, making a total of \$2,750 per day, or \$82,500 per month, which would pay for the plant in about three months. And the elevators could not do all the business offered, for cars would frequently stand on track for weeks at times.

Chicago was then the storehouse and grain market for the West, Northwest, South and South-

west. There was no storage room elsewhere. The grain simply had to come to Chicago. All cars of grain on all railroads consigned to Chicago went to store in regular elevators. A grain elevator receipt was issued for each car or canal boat load, according to the grade as inspected. This warehouse receipt was registered at the office of the state registrar and it was as good as a certified check on any bank. The grain receipts were bought and sold on 'change; and when the grain was wanted for shipment, the shipper would present his receipts at the elevator office and, after paying the storage charges thereon, would receive an order on the elevator for the grain.

Then grain elevators began to be erected at Milwaukee, at Duluth, at Kansas City, St. Louis and at other points, and it was found that the Chicago business was being diverted to other cities and that Chicago receipts were falling off. So the elevator owners and operators reduced the storage rate to 2½ cents for the first twenty days or fraction thereof, and one-half of one cent for each additional ten days or fraction thereof; nevertheless, the grain continued to be hauled to other and new grain centers.

The state of Illinois then enacted a warehouse law, requiring regular grain storage warehouses to take out a license to run as public grain elevators, and fixed the storage rate by statute. The charge for storage of grain in a public warehouse was made 1¼ cents for the first fifteen days and one-quarter of one cent for each additional ten days. Even at this rate the profits were large, but the business was being reduced, and it was seen that Chicago was becoming a way station for grain, for the terminal charges at Chicago were a function to divert the trade, as will be seen by the following:

Between the years 1871 and 1875 the lake, or vessel, charges on a bushel of grain between Chicago and Buffalo ranged between 22 and 18 cents. The lake carriers consisted of brigs, brigantines, barques and the steamers called propellers, the average capacity being about 30,000 bushels. Vessel properties, like the elevators, were money makers. A schooner carrying 30,000 bushels of grain to Buffalo at 20 cents per bushel would receive \$6,000 for the trip; and every craft that could carry grain was in the business. The first season the propeller *Traverse City* came out, she was put in the grain trade between Chicago and Buffalo, and it said that Hanna, Lay & Co. paid for the boat in one season.

But large steamboats were built to carry grain, and from 30,000 bushels, the maximum load, the size of the grain carrier was soon increased to 200,000 bushels. Lake rates dropped, until, in the year 1885, the lake rate was 1¼ cents per bushel to Buffalo. All the small craft have been driven off the water. Brigs and barques are not seen on the lakes now, and there is scarcely a schooner, except those in the lumber trade.

But to return to the terminal charges of 1870 to 1875:

	Per Bushel.
Railroad rate from the West to Chicago.....	\$0.10
Inspection and tallying.....	.01
Elevator charges, first storage.....	.02½
Vessel rate to Buffalo.....	.20
Elevator charges at Buffalo.....	.02
Canal and rail from Buffalo to Seaboard.....	.05

Total .....\$0.40½

A charge of 40½ cents on each bushel of grain to the Seaboard via Chicago, seemed a trifle high to the producer, to say nothing of the commissions paid to the commission men on 'change. So the Eastern and Western railroads began to make through an all-rail rate from the West to the Seaboard direct, and a rate of 25 cents per 100 pounds on bulk grain from all points east of the Missouri River was put into effect, and this rate was afterwards further reduced. Chicago elevator owners soon began to feel the effect. Grain could not be shipped from the West via Chicago, lake-and-rail, to the Seaboard at a charge of 40 cents per bushel

when the same car of grain could be sent through direct all-rail for 20 cents per 100 pounds.

The large elevator firm of Munger, Wheeler & Co. and George Armour put a special agent to work to find out what had become of the business. The agent spent several months examining the railroad reports on each of the Western railroads and reported to the elevator people that 97 per cent of the grain in bulk was billed through, and only 3 per cent of it went into store. This report was examined from every point and found to be correct, and the inspector was sent out again for several months to note changes, but the results were practically the same.

The elevator firms above mentioned then came to the conclusion that the storage business had departed from Chicago and the city's greatness, from a grain standpoint, gone forever, and, thereupon they decided to dispose of their elevators and go out of the grain business.

With the assistance of Mr. Wells of New York, a promoter, they engineered a sale of the Munger-Wheeler elevators, consisting of the Galena, Air-Line, Northwestern, Fulton, St. Paul, City, Iowa and Union elevators. The plants were capitalized at about \$5,000,000 and sold to an English syndicate, bonded to the extent of about \$5,000,000. With the storage business practically dead, the result could be foreseen. Eventually all the firms who operated and owned public warehouses for the storage of grain, sold out or retired from the business. The old firm of Munn & Scott, who a few years after the Chicago fire was short on grain in elevators and could not deliver on their grain receipts, was absorbed by the Munger-Wheeler and Armour companies, who assumed and paid all liabilities and took over the Munn & Scott elevators. The Munger-Wheeler Company sold to the syndicate, as shown above.

Armour, Dole & Co., afterwards Dole & Co., were then operated by Armour & Co. (Not George Armour, who operated the houses for a quarter of a century before, but P. D. Armour, who was in the pork packing business also, and who less than twenty years ago bought out Simonds & Runyan, who operated the Danville Elevator, at Ashland Avenue and the Illinois and Michigan Canal. This was originally the old canal pumping works and was transformed into a grain elevator. This was P. D. Armour's first elevator. The Armour Elevator Co. now owns or operate all the elevators on the C., B. & Q. and the St. Paul railroads in Chicago.)

The Buckingham Company, which operated the Illinois Central Elevators, were succeeded by the Bartlett, Frazier Co., now Barlett, Frazer & Carlington.

Flint & Thompson, on the Rock Island road gave place to Chas. Counselman & Co., who were about the first to operate cleaning houses, excepting George Seaverns, "the pioneer in the cleaning business."

The firms of Vincent & Co., R. M. & O. S. Hough & Co., Harper & Co., A. E. Neeley & Co. and Murray Nelson have all given way to new operators.

All the grain that came to Chicago had to be purchased and brought here, for Chicago was cut off at every point, with storage elevators springing up like mushrooms at all lake and railroad centers, and all-rail rates to the seaboard from the West, less than could be made via Chicago and Buffalo by lake, canal and rail. The grain storage business had departed never to return and a new grain elevator business was to rise from its ruins.

Seaverns had made fortunes in the grain cleaning and mixing business. Chas. Counselman was doing the same, and was erecting new elevators to increase his output. Other operators would follow their example. The regular grain storage houses along the river were then turned into cleaning houses, except a few, which were made regular so that the products of the cleaning houses could be stored therein and receipts issued for the grain and sold on 'change. Separators, oat clippers, wheat smutters, etc., were purchased and installed. Grain to be cleaned, clipped and mixed was pur-



chased along the different lines of railroad, and consigned to the several cleaning houses and the new business was under way. Next were added grain driers, and soft corn and wheat, out of condition, were dried, mixed and graded.

Next was introduced the grain bleacher, or sulphuring machine, with its sulphur-burning furnace and grain tower, set twenty-five feet from the elevator. Oats of light weight and poor color were clipped until the required weight was obtained; then run to the bleacher, moistened by a jet of live steam and exposed to sulphur fumes in the sulphuring tower; after which they are run into a bin and allowed to remain from twelve to twenty-four hours, then they are run through an aspirator, or (what accomplishes the same thing) elevated to the top of building and dropped through a car or a transfer spout, and thus the smell of sulphur was carried off. Now the light and stained oats are about as heavy as barley and as white as a new straw hat, and are ready to market. Wheat that has missed grade on account of smut is run to the smutter. The smut from the broken smut balls adhering to the outside hull and to the beard of the wheat is removed in the smutter by a rapidly revolving inner cylinder, set about one inch from a stationary perforated cylinder, and the wheat, being between the cylinder, is scoured or polished, and the smut removed by being drawn through the perforations to a fan.

The offal from the cleaning machines and clip-pers, consisting of oat hulls, seeds, chaff, grain dust, etc., that used to be burned under the boilers, is now all made use of, being sold for feed or run to the packing machines, packed in bags and sold to the cattle feed manufacturers. Nothing is wasted. In some plants the refuse sells for enough to pay the running expenses of the plant.

**Curing and Keeping Grain in Condition.**—This subject is too voluminous to treat in this article, but will say, what makes the successful elevator or warehouseman is a knowledge of this subject, and a personal acquaintance with the contents of each and every bin in the elevator. This knowledge can only be obtained by being in the elevator whenever grain is being run. It cannot be obtained in the office of the elevator. It is a fact well known by warehouse men that all grain in bins is apt to go off, or get out of condition, in the germinating season. All grain wants to germinate during the months of April, May and June, and it should be watched and promptly handled if found to be starting. New grain will go through the sweat either in the stack or in the bin. If in the bin, shortly after it is placed in store, if not noticed or if allowed to remain a few days too long, it will give trouble; if caught in time and handled, it becomes a good keeper. New oats will get hot and out of condition in a car in transit, and will get hot and stack up in a bin in short order, but a single turn over, and a drop down a car or a transfer spout, will cure oats as a general thing. (No one troubles much about oats, because if they get off, it is very easy to cure them). New rye and new wheat are not so easily handled. If caught in time, handling them once or twice will be sufficient, but if allowed to go too long, especially rye, they will acquire a smell hard to remove. Winter shelled corn will not keep. It must be watched and handled. Sour corn is caused by fermentation, and handling does not help it much. The grain drier is the place to cure this, but if a grain drier is not a part of the equipment of the plant, it can be mixed with 20 to 60 per cent of old corn, which will absorb the smell and moisture, but the mixture cannot be depended upon for over three or four days, as the whole mass may ferment if placed in bins, but if shipped in car lots the day after being mixed, it will generally go through all right. Wheat, rye and corn should never be run over for condition on a wet day, as they will absorb moisture. Good, hot, dry weather in summer is the best time to run grain.

The Chicago public grain storage elevators were erected at the terminals of the Western railroads,

along the Chicago River, but as cleaning houses, they have some disadvantages, since the switching charges from foreign railroads are an important item. The cleaning elevator operators found it was better to be on the belt railroad, where they could get grain cars switched from all roads. Chas. Counselman was the first to go to South Chicago, where he could get connections with both the belt railroad and the Calumet River and receive grain from all railroads and deliver to lake craft over the dock. He erected a grain elevator at the mouth of the Calumet River from the same set of plans that he had used for constructing the Elsdon and Englewood elevators a few years before, but on a larger scale. It was of the class with the working end above a high first floor with bins of the storage part resting near the earth, and conveyor belts to and from working end above and below. He has since been followed by a number of other operators, until South Chicago now does the bulk of the cleaning business.

The Chicago model elevator, as described in the foregoing article, is the best model house, but the first cost of such a storehouse is large—about 25 cents per bushel of capacity. An annex elevator, with cribbed bins resting near earth, with tunnels for conveyor belts below, equipped with the necessary machinery and conveyors over bins, using the elevator legs in the main building, costs about eight cents per bushel. (The annex to the Union Elevator, together with machinery, with a storage capacity of 1,250,000 bushels, was constructed at a cost of \$80,000, or 6¼ cents per bushel.) The so-called storage house with the working end raised above a high first floor, to give room for tracks, and with cupola to give fall from elevator heads to garners, scales and conveyor belts, and with a storage part resting near earth, same as the Annex described above, of about 1,000,000 capacity, can be constructed for about ten cents per bushel.

Another type of storage elevator is the steel tank, of ¼-inch or ⅜-inch steel, set on concrete foundation, with tunnels below and above for conveyor belts. The tanks are about 35 feet in diameter and 60 feet high, giving a capacity of about 100,000 bushels each.

The tile storage tank comes next—hollow tile, molded to an arc of the circle of the tank, with a binding tile above, this binder being filled with iron rods bedded in cement. On the outside of this tiling cement is smeared about an inch thick and a covering tile is battened with cement and placed on the outside. This gives a ring of reinforced tile, a ring of cement and a ring of outside covering tile. This construction is a little more expensive than wood, but is cheaper than iron and more durable than either. The reinforced concrete tank is simply a concrete tank with metal rods laid in the cement both ways.

The fireproof steel elevator is a house with bins constructed of circles of steel 3-16 inch thick, butted at edge and connected together with a butt strap of steel bolted to each section, and resting on circular channel steel; built up steel girders and columns, on cement piers, with cupola of corrugated iron, on steel I-beams and angle iron, with legs, garners, scales and all parts of plant and equipment of steel.

And last, but not least, is the new compromise construction of the new Santa Fe Elevator. The working part is of cribbed construction above a high basement and first floor, on wood posts and concrete basement piers; independent outside brick wall to bin floor, with metal-clad cupola above, heads, legs and boots steel. The Annex, of fireproof construction, consists of thirty-five concrete storage tanks, each 25 feet in diameter by 8 feet deep; pockets between the circles of the tanks; concrete tunnels below for five conveyor belts to the working part, and bin floor over the tanks of metal; cement roof on expanded metal, with five conveyor belts running from the working house in fireproof galleries, or, bridges; cement and steel car shed between the working house and the annex

tanks; equipped with four railroad tracks, holding twenty cars in the car shed. (Under this car shed are five belt conveyors, to carry grain from the tanks to the working house, and five more conveyor belts to carry the grain from the cars being unloaded to the working house. It will be seen that as only one car can be unloaded at one time, on one belt, only five cars can be unloaded on the five belts. Now, if five hoppers, between the first two tracks, were placed over the necessary belts and the other five hoppers, between the other two tracks, were placed over the five belts from the tanks, ten cars could be unloaded at one time in place of five as now arranged for, thus doubling the receiving capacity.)

This plant is being equipped with a Pneumatic Grain Drier in two sections, also with a grain bleacher. The power house has four marine fire-box boilers; the engine room has two independent compound Corliss Engines.

This plant is a work of art from an engineering and building point of view, and is the first of its kind in Chicago. The builders are the Macdonald Engineering Company, who constructed the Iron-dale and Rialto fireproof steel elevators.

Fireproof construction should be encouraged in grain elevator construction, and indeed is coming more into vogue, as the difference in insurance rates between the ordinary cribbed bin and fireproof grain elevator is very considerable—something like eight to one. Again, in the past few years, more grain elevators in Chicago have been destroyed by fire than are now in operation on the Chicago River.

### CONTAMINATED WHEAT SOLD.

The sequel to the story of the "Growsome Car of Wheat," told in the August number, is given in the Houston Post of August 25. That paper says:

"The police officers who have been acting as sentinels over the car of wheat over in the railway yards have been removed, the wheat having been disposed of by the railway officials, the purchaser signing the bond for \$500 required by the city that the wheat will not be ground into flour or used for human food. The purchaser signed the bond without a murmur, stating that he intended to use the wheat for animal food.

"The city has had charge of the car of wheat since August 6. The milling company here had paid for the wheat on a bill of lading before the car arrived, but the money paid out was refunded by the shipper, and the railway company which handled the car was held responsible.

"After the car arrived in Houston a negro was arrested in the Territory on the charge of having murdered the boy. He confessed and implicated two other negroes, and after the negroes were arrested it was necessary to remove them from the Tulsa jail and spirit them away to prevent a lynching."

In the army of harvest workers in the Northwestern grain belt there were this season hundreds of roughs and criminals, who terrified the farmers and residents of the small towns. From many places in Minnesota and the Dakotas there were reports of men held up in daylight, of others in saloons who were compelled to turn over their money to thieves at night, of bank vaults and store safes blown open and of houses raided.

The Michigan Bean Jobbers' Association held its fourteenth annual meeting at Saginaw on September 13 and 14. There were addresses by the president, J. A. Heath of Lenox, and Hon. W. A. Smith of Grand Rapids, besides important reports. A. T. Ferrell & Co. and Saginaw Milling Co. arranged an entertainment for the evening of September 13 at Riverside Park, to which all those attending the convention were invited, and they provided an excursion in the way of a street car ride around the city, including a trip to their plants, during the afternoon of Friday, September 14.



[For the "American Elevator and Grain Trade."]  
**CONCERNING THE DUTIES OF  
 THE DIRECTORS OF BOARDS  
 OF TRADE.**

BY L. C. BREED.

It is doubtless within the bounds of truth to state that, as a rule, in case of boards of trade, the position of director is self-sought. This being admitted, it renders still more emphatic the claim that if the candidate is elected to office, he should expect to be held strictly accountable for his acts while his term lasts and to be censured for neglect of his duties, if guilty of the same.

In view of the really great responsibility devolving on the occupant and the very considerable tax upon his time, greater in both respects than the aspirants usually realize, it is difficult to induce parties to serve for a second term, since the only compensation awarded these gentlemen is the honor conferred upon them in being elected to the office. There is, no doubt, a certain degree of benefit in a business way, which such an endorsement of a merchant by his fellows confers. The prime factor of success in the world of business is securing the confidence of merchants, bankers and the public generally. Every man who engages in trade endeavors to secure the confidence of the community in his honesty, truthfulness and fairness; and the election of a man to the position of director of a commercial body is, in effect, a declaration of the belief of a majority of the members that the successful candidate is eminently well qualified in all respects to serve them and worthy of public confidence and esteem. It is quite customary for a successful candidate to be solicited to make an address, and this request is generally complied with, the candidate acknowledging the honor paid him, pledging himself to fill the office to the best of his ability, with an eye single to the interests of the organization, and to promote its growth and influence.

A certain proportion of the director's duties are merely perfunctory, simply that of "going through the motions" in conducting the routine work of the exchange, a large percentage of which long established usage has given the effect of an unwritten law, and other duties are definitely named in the by-laws of the institution. There is also important responsibility and opportunity for the exercise of judgment in the matter of financial disbursements, such as fixing salaries, telegraphic news service, repairs to building, etc. In case of the St. Louis Exchange, the annual disbursements exceed one hundred thousand dollars, and during the past three years about sixty-five thousand dollars have been expended on the building owned by the Exchange.

Among the duties of the directors of public exchanges, the most trying are such as involve disciplining a member, or of passing on a disputed matter of prime consequence, financially, to a certain body of the members. It is creditable to the kind-hearted tendency of most exchange directors, that they are willing to stretch the rules and customs, usually, to the farthest limit, rather than pass a severer sentence than that of censure, since the suspension of a member is a serious matter and expulsion still more so. At the same time, these men have solemnly engaged to see that the rules are enforced without fear or favor, and furthermore have no right to use any discretion, if the case is proven and the correct application of the rule is beyond question. There are, however, occasionally instances where the business of the director or his commitments in the speculative market would of necessity render him disqualified, unless an exceptionally conscientious man, to give an unbiased consideration of the matter, and, in that event, the only proper thing for him to do is to decline to act.

The custom of pigeonholing applications for changes in rules is an annoying experience to those members who seek an amended form of an old rule, or the introduction of a new one. No officers of an

institution have a right to resort to such a bluffing process simply because they do not personally favor the change proposed. In case of the St. Louis Merchants' Exchange, there is a small expense incurred for judges of election or tellers, as some corporations term the parties who have charge of receiving and counting the ballots, but it would be absurd to urge that as a reason for refusing to allow the matter to be brought before the members.

There is need of greater care being taken with regard to the past record of applicants for membership, both as to their personal character and business standing, and since it is possible to ascertain this, the directors of a business exchange owe the members who have entrusted the matter to them proper protection in this regard.

In case of some boards of trade, the personnel is not made up of a majority of experienced grain men, consequently there is the disadvantage of the inexperience of the rest when matters pertaining strictly to this trade are to be passed upon. The

ment. This year the Russian shortage will probably serve a similar purpose. Meanwhile the market for the crop has widened at home and abroad.

The seeding of macaroni, or durum, wheat has come into farm practice where the risks of drought are such as to imperil the crop of older varieties used to a larger rainfall. Durum is a better yielder and grows well at twenty inches of rainfall, on which other varieties would not make a stand worth cutting.—Wall Street Journal.

### AN INDIANA ELEVATOR.

Charles Sharp at McGrawsville, Ind., like a few other men in the grain business, not many, however, believes in making the greatest use of his time and capital. There are not infrequent intervals when a man's time is not wholly occupied with grain, and to utilize these intervals Mr. Sharp handles, besides grain and seeds, live stock and wool, flour, lime and cement, farm implements, bug-



CHARLES SHARP'S ELEVATOR AT MCGRAWSVILLE, INDIANA.

question is, would it not be better if, in such cases, directors should abstain from voting, than to base their opinions (some directors favoring the measure in company with certain directors, and others opposing, who took their grounds for their action from other directors) on impressions rather than on knowledge?

### MACARONI WHEAT OUTLOOK.

Poor quality of the Russian macaroni wheat has solved the marketing problem of the Northwest growers of that variety in the United States and Canada, in large part at least. Earlier in August the question of how to dispose of the crop of 35,000,000 bushels in the United States alone was bothering the Northwest trade.

Last year's crop was estimated by the Duluth Commercial Record at 18,300,000 bushels. Comparatively little of this was consumed in this country. About 5,600,000 bushels were used by country mills and for reseeding, but the larger mills have not taken to macaroni wheat with any degree of readiness.

This situation made a market abroad necessary, and the shortage of supplies from the Mediterranean countries of growth came in the nick of time to help the American market out of its predicament.

gies and harness, and paints and oils, all of which work nicely together and keep his employes busy and his capital turning over.

The photograph of his elevator shows the premises as they appeared in 1903, about two months after its completion. It has storage capacity of 40,000 bushels, and its machinery is moved by a Fairbanks-Morse Gasoline Engine. The amount of grain handled runs as high as 300,000 bushels a year.

The Calloway-Jones Grain Co. of Oklahoma City on August 27 sold to an export agency one million bushels of Oklahoma new corn for November and December delivery, for export to Germany and Russia. This is said to be the largest single sale of grain ever made in Oklahoma.

Grain exports for August from New Orleans were 990,447:30 bushels of wheat and 9,530:10 bushels of corn. For the year ended August 31, there was exported from New Orleans, as per Chief Inspector Richeson's records, 2,612,103:10 bushels of wheat, 18,182,186:04 bushels of corn, 3,728,055 bushels of oats and 1,081,075:20 bushels of barley. These are increases over 1904-05 of all the wheat named, 773,832:31 bushels of corn, 3,714,480 bushels of oats and all the barley.



**JAS. S. NEVILLE DEAD.**

Jas. S. Neville, mayor of Bloomington, Ill., and member of the Illinois Railroad and Warehouse Commission, died on August at West Baden, Ind. The end came unexpectedly and was caused by acute indigestion.

Jas. S. Neville was born in Mackinaw, Tazewell County, Ill., on March 11, 1856, of English and French descent. The youngest of a family of five children, he began his education in the common schools of Eureka, but after his father's death, which occurred when the son was twelve years old, the family removed to a farm and he further pursued his studies in the district schools. At the age of twenty he went to the West, where he spent three years, and on his return to Illinois located in Bloomington in 1878, where he read law with Capt. J. H. Rowell and John M. Hamilton. In 1880 he was admitted to the bar, but he remained in the office of his preceptors until Mr. Hamilton was elected lieutenant-governor and Mr. Rowell a member of Congress. Subsequently he was a member of the law firm of Neville & Blade, until Judge Blade went to California, after which he became associated with the law firm of Rowell, Neville & Lindley. He was appointed railroad and warehouse commissioner by Governor Yates.

On August 11, 1884, Mr. Neville married Miss Nellie Bent, a daughter of Horatio Bent, of Bloomington, and to them was born one daughter, Miss Edith.

Mr. Neville was a man of affairs in more ways than one, says the Bloomington Pantagraph. He was a man who looked out for the material welfare of his family and in the course of his comparatively short life acquired much more of wealth than the ordinary man in a community of that size. He owned a beautiful home on East Jefferson Street, besides a large block of stock in the German American Bank. He was also owner of about 600 acres of fine farm land in Dale Township, near Covel, one farm of 225 acres having been purchased by him only last winter. His estate will run up into six figures without a doubt.

The funeral took place on August 20, from St. Matthews' Episcopal Church, all the official bodies of the city being present and the business houses closed. After the burial service at the grave had been conducted, former Governor Yates made a short eulogistic address. The honorary pallbearers were Governor Deneen, ex-Governor Yates, Hon. A. E. Stevenson, Col. D. C. Smith, A. L. French, Andrew Russell, Scott Cowan and Col. William Kilpatrick.

**MUST FURNISH CARS.**

The Interstate Commerce Commission, in an opinion by Commissioner Clements, in August, rendered a decision in the case of James E. Eaton against the Cincinnati, Hamilton & Dayton Ry. Co. The cause of complaint in this case was the alleged failure and refusal of the defendant carrier to furnish the complainant cars at Grover Hill, Ohio, for hay and grain shipments in September, October and November, 1905, while during that period the carrier furnished his competitors, including the operators of an elevator, cars on orders subsequent to his own, forcing the sale of part of his produce to his competitors. The Commission held that the discrimination was unjust and awarded him money damages in the sum of \$200.

In the decision the Commission said that the facts left no question in their minds that unjust discrimination was practiced against complainant, but that the difficulty of measuring the actual damages by way of reparation shows the importance of reasonable rates and equal treatment, since there can be no adequate reparation which will repair the wrongs to a shipper which injustice may work. That the complainant has been damaged in this case by unfair treatment is clear, but to measure that damage in a way to make him whole—to reimburse

him for lost time, or injury to his business, for lost profits, and the loss of prestige and standing with his neighbors, in canceled contracts and avoided sales, in losses of capital employed, and at the same time be fair to the defendant railway, is not only difficult but impossible. The best that can be done is to estimate as nearly as may be that which with reasonable certainty be directly charged to such unfair treatment, and for the rest the complainant must suffer, as is always the case where injustice is done by such discriminations.

**THE WILD OAT.**

In portions of the Northwest there is a general belief that the wild oat is becoming a menace to the farms. It seems to have spread in the last seven or eight years and to have lost nothing of its prolific character.

Several years ago Prof. A. D. Wilson of the Minnesota Experiment Station wrote to a friend for a sample of wild oats. The friend simply mailed a sample of wheat as it was being mar-



THE WILD OAT.

keted by a farmer, with the statement: "This wheat is being docked 16 pounds per bushel for wild oats." Another farmer in Minnesota marketed wheat this year that was docked 23 pounds per bushel, chiefly for wild oats. It would seem that there is reason to fear the wild oats when such instances occur.

The wild oat (*Avena fatua*) is by some regarded as simply a degenerate form of the cultivated oat. It was no doubt introduced into this country as a weed. The seed is almost exactly like that of the cultivated oat and is often sown with good oats through ignorance or carelessness. It has become most abundant and troublesome in the spring wheat country. It is not very troublesome in the older winter wheat states where rotation of crops is practiced; in fact, in some localities it is practically unknown. The wild oat is of course easily detected in wheat; but in good oats the trouble does not end with lowering the grade of the thrashed grain. The stiff, twisting awns sometimes cause trouble by irritating the nostrils and mouths of animals.

There are three varieties of the wild oat, all quite similar in appearance and all annual weeds. The common wild oat, shown in the cut, which is reproduced from the pamphlet of Lyster H. Dewey, is distinguished from the cultivated oat by its usually large size and earlier and irregular ripening by the separate florets falling as soon as ripe and by the long, stout, twisted and bent awns borne by the second florets (see c, d, in cut). The

floral glume, inclosing the grain, is hairy below the middle, usually nearly black at maturity (see d in the cut) and is harder and tougher than the cultivated oat while the grain is very light in weight.

**INSPECTION OF EXPORT GRAIN BY THE GOVERNMENT.**

So far as announced the Government, through the Department of Agriculture, will for the immediate present establish but two laboratories for the testing of grain to be exported to Europe. One of these will be at New Orleans and the other at Baltimore, apparently the two ports chiefly affected by foreign complaints of imperfect inspection, or, at least, as the ports of origin of the grain received abroad of late in bad condition.

These laboratories are being created under the direction of Dr. B. T. Galloway, chief of the Bureau of Plant Industry; Prof. Albert F. Wood and Prof. Edgar Brown, from the seed laboratory. Dr. Galloway said at Baltimore that the Department has been testing samples of grain in this country and then repeating the test through a representative abroad of the same grain received there. These preliminary tests caused Dr. Galloway to recommend to the Secretary of Agriculture the establishment of several laboratories on the coast, where the work of testing shipments could be carried on, a recommendation which has been approved. A synopsis of this recommendation is as follows:

1. That two laboratories be established, the location to be decided after careful examination of the conditions existing at the principal export ports, such as Duluth, Boston, New York, Philadelphia, Baltimore, New Orleans and Galveston. I recommend that these laboratories be equipped for determining the simpler factors of quality and condition in samples of grain, such as the amount of moisture, the amount of foreign material and damaged grains, and that the result of this examination shall be stated on a percentage basis on printed blanks, which shall constitute the certificate mentioned in the bill. As it is not practicable at present to correlate the percentage factors above referred to with existing grades, it is recommended that for the present no attempt be made by the Department laboratories to define existing commercial grades any further than is indicated by the statement of the actual condition of the grain on the percentage basis.

2. I recommend that an expert be selected from among the practical grain men familiar with the whole grain trade and the present methods of inspection, who shall act as advisory agent during the organization of the work, with a view to his finally taking charge of it. Such a man can do much to enable the Department to improve the present practices of inspection and to obtain information as to the basis of our work.

3. In order to accurately determine the effect of the varying conditions of grain or its deterioration in transit, it is recommended that an agent be placed in some foreign port for the purpose of giving us definite information upon specified shipments which have been examined here before shipment. The work will be confined mainly to corn. It has already been in progress for one year, and much valuable information has thereby been obtained.

In discussing this subject with the government's experts named at a meeting of these gentlemen with members of the Baltimore Chamber of Commerce in August last, Blanchard Randall of the exporting firm of Gill & Fisher, took exception to the secrecy of the inspections the government intended to make. He expressed the opinion that better results could be obtained if the reports of the inspectors were made public. "If Baltimore, for instance," said Mr. Randall, "is shipping defective grain, we want to know it. We want this knowledge not only from the government inspectors at the laboratories, but from the inspections the government's agents make abroad. If evil exists, we would like to correct them, and all exporters will unite in such an effort."

The government's agents admitted that that was the proper course to pursue and decided to accept the suggestion.

Walter Kirwan made the suggestion that the farmers be educated as to the kind of corn to



plant and also be made to understand when it is in condition for shipment. He contended that much complaint of injured grain from the foreign buyer was due to the fact that it left the producers' hands unconditioned. He suggested that the root of the evil be reached by the department in its educational work.

[From Insurance Engineering.]

### FIRES IN GRAIN STORAGE.

During the past twelve months the several new types of construction for grain storage described in Insurance Engineering for May, 1903, have been tested by actual fires. The results are of interest not only to the owners of the structures and the underwriters who insured them against loss by fire, but to banks that loan money on grain stored in them.

#### GRAIN STORAGE IN STEEL TANKS.

Steel tanks have been erroneously supposed to furnish fireproof storage for grain for no better reason than that steel itself will not burn. This type of construction has inspired so much confidence in some banks as to cause them to loan money on grain in steel tanks without the customary safeguard of insurance.

The fire of January 15, 1906, in the flour mill of the Dunlop Milling Co., Clarkesville, Tenn., seems to prove that steel tanks are no safer than wooden ones:

About 3 o'clock Monday morning, January 15, the night watchman discovered fire in a lot of sacks which were piled just outside the sack room, on loading platform extending from sack room west the entire length of the plant. The watchman at once endeavored to prevent flames from communicating to woodwork by throwing the sacks off the platform onto the L. & N. Railroad tracks, in which attempt, however, he failed, inasmuch as the sacks were caught up by the wind, which was blowing very hard, and carried directly back to the plant, and set fire to it in several places. The watchman then endeavored to bring into service private protection afforded by standpipe and hose, but in this he also failed, as the flames forced him to retreat. Being unsuccessful in his efforts to extinguish the fire in its incipency, he then rushed to the office and called the fire department by telephone.

From the best information obtainable, some fifteen or twenty minutes elapsed between the time the fire was discovered and the arrival of the fire department. The flames had gained considerable headway, on account of the light construction of the warehouse, and effective service from the fire department was impossible, although it is said good work was done by the department, considering the circumstances.

There were two hydrants within easy reach of the plant, and a third one some 300 feet away. A steamer was placed at one hydrant, which supplied three lines of hose, and in addition to this a line of hose was run from one of the other hydrants, making four streams.

It was not longer than an hour and a half or two hours before all the buildings were practically wrecked, but during this time the high wind continued from the south. Thus the heat from the entire plant was driven toward the grain tanks, both of which were soon heated.

There was considerable discussion between the firemen and interested parties, as to whether or not it would be wise to turn a stream of water on such portions of the tanks as could be reached and thus endeavor to keep them as cool as possible, but it was finally decided that sudden cooling of the steel might cause it to crack and subject the contents of the tanks to direct exposure from the flames; consequently the tanks were heated to such an extent that the grain inside took fire.

In tank No. 1, or the one farthest away from the boiler house, there were stored some 19,000 bushels of wheat, about 200 of which were afterward found to be entirely burned, while a large quantity was badly scorched and cooked; but, strange to say, some of it resumed its natural color, although considerably damaged by smoke. Fire did more damage in this tank than in No. 2, which is said to have been caused by the opening through which the grain was taken from the tanks and conveyed back to the elevator being unprotected, thus causing a draught.

In tank No. 2, or the one nearest the boiler house, was stored some 29,000 bushels of wheat, but it seems that the heat against this tank was not so intense as in the case of tank No. 1, on account of the direction of the wind, although

the grain was thoroughly cooked on the mill side, to a depth of at least six inches; beyond that depth, much of it was discolored and the entire quantity more or less subjected to smoke damage. However, on the date of this inspection, this tank was being emptied, and it was almost impossible to detect the smell of smoke after the grain was out of the tank.

Being uncertain as to the proper course to pursue, and not wishing to run any chances in acting contrary to the wishes of insurance companies interested, the mill people allowed the tanks and grain to remain undisturbed for about eight days after the fire, during all of which time, of course, fire and smoke inside the tanks continued to do its damage. It is thought, however, that at no time was there any flame on the inside of the tanks.

#### CONTENTS OF STEEL TANKS ON FIRE AFTER EIGHT DAYS.

After eight days, it seems that arrangements were made to open the tanks and empty the contents, whereupon a hole was cut in the side of tank No. 1, where heat had been most intense and the tank damaged, and some of the grain allowed to run out. It was soon discovered that the wheat was still on fire and that the draught through the opening was causing a blaze, therefore the opening was immediately closed and the tanks and contents allowed to remain undisturbed for about ten days longer. A second attempt was then made to empty these tanks, which proved more successful, inasmuch as a hole was cut on the opposite side from where the heat had been most severe and where the contents had contained the most fire, which allowed the grain to run away from that side, and out, the result being entirely satisfactory, and not as mentioned in connection with the first attempt to empty the tanks.

The tanks, two in number, were of steel construction, and entirely free from woodwork, the tops and bottoms being of the same construction as the tanks themselves. Both tanks were about 30 feet in diameter and about 40 feet high, each having a capacity of about 30,000 bushels, and were situate 50 feet 6 inches south of the plant, opposite that portion known as the elevator. All connections between the elevator and tanks were of metal construction.

The mill proper, 60x45, and 60 feet high, as well as the warehouse, 43x120, and 15 feet high, were of ordinary light frame construction, while the elevator, 42x50, and 90 feet high, was of slow-burning construction. The boiler house was of brick construction, but with openings in wall on mill side.

C. E. WHEELER.

This was an "exposure" loss on the grain in the steel tanks, caused by the construction and character of the mill buildings. The steel buckled considerably on one side of tank No. 1, and the shape of the tops of both tanks was destroyed by the heat. The conveyor was also of steel.

#### GRAIN STORAGE IN HOLLOW TILE TANKS.

Last October, a fire occurred in the grain elevator plant of H. W. Rogers & Bro., Harvey, Ill. The elevator proper was of wooden construction, the storage tanks being of hollow tile. Fireproof Magazine says:

The storage tanks were constructed in the early spring of 1905 to give increased capacity to the elevator. The operating house or elevator proper was of wood construction, to which the tanks were connected by a gallery, tunnel and belt conveyor about 80 feet long.

The fire was so hot that the unprotected steel shaft supporting the gallery and midway between the tanks and operating house was heated red hot and the fire burnt out the belt (which ran through the gallery cupola) to about half way through the cupola.

The 150,000 bushels of oats in the tanks at the time were saved without damage, notwithstanding the fierce heat.

The tanks and cupola were not damaged in any way.

The ten tanks are built of hollow tile, 24 feet inside diameter and 70 feet high, with a capacity of 24,000 bushels each, a total of 240,000 bushels. The gallery connecting the tanks and elevator is of steel, with corrugated iron on the roof and sides, the roof also having 3-inch book tile protection, supported on T irons. The cupola over the tanks is of steel frame, fireproofed with 6-inch hollow tile, and the spout holes in the floor of the cupola, giving access to the tanks, are of cast iron frame and covers, the covers being 14 inches diameter.

Like the Clarkesville fire, this would have been an "exposure" loss on the grain in storage, save for the fire-resistive character of the tanks.

#### GRAIN STORAGE IN REINFORCED CONCRETE TANKS.

On February 17, 1906, the large wooden grain elevator at the Peavey Duluth Terminal, Duluth,

Minn., was destroyed by fire, with a loss estimated at \$1,000,000.

Adjacent to the elevator site are thirty-five circular tanks of reinforced concrete construction, having a combined storage capacity of about 4,000,000 bushels.

It is said that there are no fire hydrants within half a mile and that it was necessary to cut holes in the ice in the slip to get a supply of water.

The owners, the Globe Elevator Co., advise Insurance Engineering as follows:

The fire was first discovered at 7:15 p. m. in the upper part of the northwest corner of the cupola, and in a very short time the entire upper part of the building was in flames. The elevator was about 60 feet higher than the concrete tanks, which are on the north side, the tanks being 65 feet away from the main part of the building. The wind was from the southwest, and in consequence the flames were carried directly onto the two easternmost tanks.

Three of the views that we are sending were taken at night while the fire was burning; but the view showing the ruins and the concrete tanks standing intact was taken the day following the fire. Aside from one or two holes in the tanks, caused by the I-beams being dragged out when the galleries fell, and an old crack or two of no consequence and above the storage part of the tanks, which are slightly enlarged, there appears to have been no damage whatever to the tanks.

Under such a severe exposure as this fire, there is little doubt that a heavy loss must have occurred on the grain in the tanks had the latter been of inferior construction.

The foremost lesson of these three fires is the "exposure" danger to the fireproof portion of a plant due to the proximity of another portion that can easily be destroyed by fire.

Of the three types of construction tested, the hollow-tile tanks and the reinforced concrete tanks stood the test, whereas the steel type failed.

### WISCONSIN INSPECTION.

An appeal will be taken by the Wisconsin Grain and Warehouse Commission from the decision of Judge Sanborn in the case of the Globe Elevator Company against the Commission and a fight begun on the injunction secured by the Duluth-Superior Milling Company against the Commission in the Circuit Court. The appeal will be to the October term of the U. S. Court of Appeals at Chicago.

The decision by Judge Sanborn is the only one that has so far been against it. Judge Vinje has several times held the law valid in the Circuit Court, as did Judge Parish of the Ashland circuit, even after Judge Sanborn had laid down the decision in his court. The Parish decision will stand, Gregory, Cook & Co., who brought the suit, having no interest in the affair, the Commander Mill at Superior having been destroyed by fire. But the Commission will fight all the appeals that have been taken in other cases.

There are also several cases pending in which mill and elevator men have been found guilty of obstructing and interfering with the work of the Commission's officials and inspectors, and these cases will be pushed by the prosecuting attorneys, at the instance of the Commission.

It has also been decided to bring suits for the collection of several thousand dollars in fees which the Commission claims for the inspection of grain in Superior. The railroad and other interests have continually maintained that the Commission had no right to inspect grain, and so have refused to pay the fees.

For the present the Commission's hands are tied, as it can do very little in the way of inspection, because of the Sanborn injunction. The Duluth-Superior Milling Company did try to get an injunction from Judge Vinje in the Circuit Court, but this was denied, and the case will not be tried on its merits.

Galveston's grain exports for the year ended August 31, 1906, were 5,590,883 bushels of wheat, 11,299,009 bushels of corn and 281,450 bushels of barley.



[For the "American Elevator and Grain Trade."]

## THE KIND OF A CROP REPORT THE PEOPLE WANT.

BY H. S. GRIMES.

At the meeting of the Grain Dealers' National Association at Chicago, in June last, Mr. George A. Wells, secretary of the Iowa Grain Dealers' Association, read a paper on Government crop reports, which brought the question before the convention. At that time I took the stand, which I believe I am justified in taking, and will be upheld in by all those interested in either growing or selling the products of the farm, that we would be much better off if we had no reports at all than we would be with reports of which there was any doubt at all as to their accuracy. I admitted in my remarks that in the past five years there had been a wonderful improvement in gathering the statistical reports as to the amount of grain raised in the United States, but I also stated that it was not perfect by any means.

While it could not be perfect in my opinion, the system could be further improved so that it would be as nearly accurate as it could possibly be gotten; and it was a debt owed by the Government to the producers, consumers and handlers of cereals that it should use every possible means to give reports that would be without a question if relied upon. I claim that it is as much a duty for the Government to do this as it is to furnish information of any character. It is generally conceded that when the Government takes hold of a proposition in time it is sure to become proficient. The producers, dealers and consumers have surely waited long enough to be able, when the Government makes a report, to say that this report is accurate and that we can calculate upon the situation as given us.

But it seems that the excuse offered by the Agricultural Department is, "insufficient appropriation of funds" to carry out the gathering of statistics which undoubtedly would make the Government report as nearly perfect as it possibly could be gotten. The system that has finally been adopted within the past two years can be increased in volume so as to perfect these conditions; and with sufficient funds in the hands of the Department, a continuation of the system, with the additional experts that the increased appropriation would permit them to employ, I have no doubt could accomplish all that a very patient public who are interested desire.

I suggested also in my remarks before the convention that it might be well for the Agricultural Department to go into the project of seeing if some method might not be adopted whereby the rural mail carriers might also become statisticians, and by this method increase the reports that it would no doubt be able to give us—at least a report that we would have more confidence in than we have in the one that we now get.

We are supposed to receive from the Government on the 10th of each month a report of the condition of the growing crops and those that have been harvested. At that time we are supposed to receive the visible supply statistics. There is no doubt that the data can be gathered so that the report will be almost perfect, with the present force of statisticians. But at the same time that we get this report, it is as important that we receive the report of the invisible supply as of the visible, as a compilation of the two will give us such facts as to the conditions as we can place some reliance upon. In order to get the invisible supply of grain it will be necessary to get the stocks on hand held by the farmers; and this in itself is a very difficult proposition, and one that will require the service of many more experts than we have at the present time. If we could once regulate the situation so as to be able to get the invisible supply, the secret of the whole situation

would be solved, and we could then say to our people, these reports are as accurate as can possibly be gotten together. We should have a report on the situation on all growing crops from the time they are seeded until gathered and put away in the elevators or farmers' granaries.

When this can be accomplished by the Government it will be able to do all that anyone can ask of it; and this can be done with a suitable appropriation of funds to employ enough statisticians to gather the facts; and in my conversations with the Senators and Representatives I have never found one but agrees with me perfectly, and they indicate by this agreement that they are willing and ready to vote for a sufficient appropriation at any time the Agricultural Department asks for it in such a manner that it can be plainly shown that the fund will be used for the purpose I have mapped out.

## CARE OF GAS ENGINES.

The gas engine is not as complicated a piece of machinery as a great many persons believe, and there is no good reason why engineers are experiencing as much trouble as they do, says a writer in *The Practical Machinist*. In order that a gas engine may be easily and successfully started at the first attempt, it is well to bear in mind the fact that the engine must be in good condition.

Valves should be timed correctly, i. e., they must open and close at the proper time. The valves and piston rings should also be tight to prevent leakage and to insure good compression. The igniter points should be clean and the insulated terminal on the engine should be perfectly insulated, so that there can be no short circuit. If the batteries are in good condition a fat spark will be seen between the points when the igniter is snapped. It is good practice to occasionally change the wires leading to the igniter and engine when the make-and-break igniter is used. This reverses the direction of the current and it will be found that the platinum points will wear more evenly than if not changed. I have repaired engines when one platinum point was entirely gone before the other had even shown signs of wear.

In starting the larger engines it is advisable to adjust the point of ignition a little later than when the engine is regularly at work. Gas engines of the smaller sizes running at high speeds have the igniter set so that the charge is exploded earlier than in the larger sizes. The mixture of gas and air must also be in the right proportion, for if the mixture is too rich or too weak a less powerful explosion or none at all will be the result. In cold weather and especially where engines are operated out of doors it is found that better results usually are obtained by cutting down the amount of air admitted to the cylinder. Engines in cold places are more easily started by first warming the cylinder. This is best done by means of a blow torch. Air entering the mixer should also be heated by the torch. It is advisable in some cases to arrange the suction pipe so that the air is always slightly heated before entering the cylinder. This causes the air and gas to mix more readily.

Once I was called to examine a marine engine which had just been returned from the machine shop. It had been thoroughly overhauled and put in first-class condition. The engine ran beautifully, but for one reason or another would not develop full power, running even slower than it had before being overhauled. The engine was regulated by the throttle, but upon being opened wide would only run at about half speed. I noticed that the exhaust valve did not rise very high in an engine of that size, so I held a piece of iron one-eighth of an inch thick under the valve stem, i. e., between the stem and the cam. When the engine was started again the stem, of course, was raised higher by one-eighth of an inch, which

cured the trouble. The trouble was that the engine could not get rid of the exhaust freely.

Sometimes it happens that a gas engine which ran at a certain speed when first set up, in a few months will begin to run slower. This is caused by the governor springs becoming weak or slack and letting the weights fly out oftener, thus making the engine miss an explosion oftener, which lowers the speed. This can be remedied by tightening the governor springs.

Pounds in a gas engine are usually different from the pounds in steam engines. Some of the causes of pounding in a gas engine are lack of cylinder lubrication, spark set too early, water not circulating in the jacket and improperly fitted flywheel keys. Each trouble suggests its own remedy. I believe that if many engineers would not tinker with their engines, but simply keep them clean, and when an engine gives trouble carefully look over the engine, instead of turning and twisting the first bolt or nut they get hold of, a great deal of worry and trouble would be avoided.

## NEW SYSTEM ON THE COAST.

In view of the high price of grain sacks and the declining price of wheat on the Pacific Coast, the grain growers are endeavoring to get away from the practice of sacking the grain at the thrasher, as in the past, by storing in bins on their own premises. Near Reardan, Wash., Carson Bros. have fitted their "combine" with two tanks each having a capacity of 25 bushels. The grain was spouted directly into the tanks from the machine. When full these in turn were emptied into an 85-bushel steel tank, which was carried on a wagon and driven alongside of the machine. The grain was then taken to the granary, which is of steel made in circular form, being eight feet high and sixteen feet in diameter. It will hold about 1,200 bushels. This granary is of home construction, steel sheets being fastened perpendicularly to 2x4 studding. The floor is of wood, the roof of steel. A number of these bins are in course of construction near Reardan.

Near Dayton, W. H. Richardson, who last year inaugurated the storage tank system for the handling of his crop in bulk, extended the system to cover the balance of his ranch, which was under summer fallow last season. He has erected wooden tanks at convenient points where the grain is elevated directly from the thrasher by means of a pneumatic pipe operated on the same principle of a wind stacker. Each tank has a capacity of about 2,500 bushels, and is so constructed that a wagon may be driven underneath and the grain drawn out by means of a slide in the spout over the wagon box. The wagons are then driven to a combined cleaner and elevator, which has been constructed on a sidetrack of the O. R. & N. The cleaner has a wagon dump which empties the contents of the wagon into a hopper of the cleaner. After passing through the cleaner it is elevated to the hopper, to which a scale is attached for weighing the grain as it is stored. At the bottom of the elevator a spout is connected with the storage bins from which the wheat is drawn into the cars below. All of the work is done by machinery, and the grain is thus handled rapidly and at a very small expense.

Mr. Richardson says that the saving effected last year by the doing away of sacks amounted to nearly if not quite as much as it cost to erect the tanks.

This year the saving thus effected, with sacks at 11½ cents each, will go a long way toward paying for his additional improvements. He says that the crop last year was handled very successfully in bulk, and that he is satisfied that this has effectually solved the grain sack problem.

Another advantage is that the thrashermen will make a discount from the thrashing charge to those patrons who "take the grain from the machine." The new system is also stimulating the erection of storage elevators for handling the grain between the farmers and the exporters and millers.



**INDIAN CORN.**

The winds pass over. Quick it bends  
Then, momentarily, erect it stands.  
Rains beat it down. The kindly sun  
Doth lift it up with gentle hands.

But we whom winds of passion bend,  
Down beaten by misfortune's rain,  
Spring not erect when winds are gone,  
Are by no suns upraised again.  
—New Orleans Times-Democrat.

[Dedicated to Our President.]

**FREIGHT RATE LEGISLATION ACCOMPLISHED.\***

BY F. S. RUTHERFORD.

Well, they have disturbed the magnate with his fixing up of games;  
There were interposed objections to his list of favorite names;  
Even though it were a pity and a shame to knock them out,  
That champion sticker, Roosevelt, has brought it all about.

The rich and influential have no cinch upon the corn,  
Whether bought for foreign shipping or in the land you're born;  
The rates are made and quoted now for everyone the same,  
No matter what his pedigree, no matter what his name.

No more the "midnight" tariff beams upon a favored few;  
No more its frowns and shadows are a menace unto you;  
It brings no more of pleasure, and increaseth not the wealth  
Of the fellow who was inside, and it's telling on his health.

Every agent of a railroad now must work it on the square;  
The death of "midnight" tariffs makes him treat his rivals fair;  
No more securing business through a tariff born at night—  
All rates are made and published in the glare of honest light.

Railroad magnates now are powerless to work it East or South,  
To take the bread and butter from your children's very mouth;  
No more can rob your children of a covering for their feet  
To enrich a favored shipper through a "midnight" tariff sheet.

Thousands, yes, and tens of thousands, feel a newer hold on life,  
With the gladful disappearing of the magnate's cut-rate knife;  
Go forth with joy and hoping, and engage in honest work,  
No fear of interference by a "midnight" tariff's dirk.

The Senator who told us that the old way was the best,  
That a shipper who was injured in the courts should put the test,  
Earned not a bit of gratitude from woman, man or child  
For enactment of the Hepburn bill with his opposition wild.

Let that Senator take notice that his vote did not avail  
To kill rate legislation and a "lawing" course entail;  
Though the roads have many lawyers, and they hire them by the year,

The public won't be "courting"—of their lawyers have no fear.

With railroad corporations shippers need not go to law,  
Their hords of brainy lawyers now hold them not in awe;  
They do not have to worry with the filing of a suit,  
For fast upon the other's leg is found the "lawing" boot.

With all their fuss and bluster 'bout the mysteries of rates,  
The roads don't find confusion in the Hepburn plan of freights;  
The clerks who used to figure and compile the tariff sheets  
Are working just as usual, when their work approval meets.

All we asked of Teddy Roosevelt, and all he said he'd do,  
Was to keep the railroad officers from making things askew;  
No objection to the railroads making tariffs on the square,  
But he wishes that the managers hold to them full and fair.

We needed legislation, and we got it pretty quick  
When the Senate saw the shaking of our Teddy's noted stick;  
Rebates and "midnight" tariffs deep are buried under ground,  
And the whilom cut-rate hunter now is never seen around.

A sequel to the lines on "Freight Rate Legislation" by the same author, published in these columns in the number dated November, 1905.  
St Louis, September 5, 1906.

**COMMUNICATED**

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

**CROPS IN NEBRASKA.**

*Editor American Elevator and Grain Trade:*—Crops are excellent in Nebraska this year. A bumper corn crop is in sight in Greeley County; oats were never better and wheat is good.

Yours truly,  
Scotia, Neb. THOMAS W. COOK.

**CROPS IN KANSAS.**

*Editor American Elevator and Grain Trade:*—Our crops in this section are the best ever known and the conditions perfect. Wheat overran the estimates about one-half, but the oat crop is light—about half a crop. Corn never was finer and promises a big yield. Grass and alfalfa will make heavy yields, and the fruit crops of all kinds were never better. All around we are satisfied, and look for a prosperous year. Yours truly,

Manhattan, Kan. GEO. T. FIELDING & SONS.

**BARTELDES SEED CO. INCORPORATED.**

*Editor American Elevator and Grain Trade:*—We enclose you \$1, to pay subscription for your paper. It might interest your readers to know that the firm of F. Barteldes & Co., Lawrence, Kan., recently has incorporated and will be known as the Barteldes Seed Co. It has a fully paid-up capital stock of \$300,000. F. W. Barteldes is president, Max Wilhelmi, vice-president, and J. Uhrlaub, secretary and treasurer. The managers of the Denver branch will be the same as before—C. R. Root, H.

Warnecke and J. Wiesel. C. F. Eltzholtz will continue in charge of the Oklahoma City house.

Yours truly,  
Lawrence, Kan. THE BARTELDES SEED CO.

**PURCHASED A LINE OF ELEVATORS.**

*Editor American Elevator and Grain Trade:*—I have purchased the H. J. Reis line of elevators of Armstrong, Iowa. This gives me a line of twelve elevators besides the mill at Luverne. The elevators are located at Gruver, Maple Hill, Gridley and Neil Spur, Iowa; Bricelyn, Walters, Ormsby, Ash Creek, Trosky and Ellsworth, Minn.; Clear Lake, S. D.

The headquarters and main office will be at Luverne, Minn. Yours truly,  
Luverne, Minn. JOHN P. COFFEY.

**THE NATIONAL HAY ASSOCIATION.**

*Editor American Elevator and Grain Trade:*—The Put-in-Bay Convention, as predicted, was a successful one from every point of view—large attendance, sessions of the convention well attended, and no friction anywhere. The contract has been let for printing the annual report, and barring a printer's strike or some other unavoidable accident, it will be in the hands of our members much sooner than last year.

The board of directors have ordered me to take a postal card vote to ascertain the wishes of our members as to the place and time for holding the 1907 convention. The committee on place, at Put-in-Bay, reported unanimously in favor of Niagara Falls. For your information, we give you a list of our conventions, and where held, as follows: Cleveland, Cincinnati, St. Louis, Detroit, Baltimore, Indianapolis, Chicago, St. Louis, Toledo, Put-in-Bay, Ohio. It can be said of the summer resorts that there are during the summer months regular tourists rates that are nearly as cheap as one and one-third fare, the convention rates for all assemblages, such as ours.

If President Wasmuth's administration is to be a success, it will take the united efforts of all to assist him. If one and all would see or write to some good hay man and insist on his joining the Association, our membership would be increased by not less than 200 within the next thirty days.

A number of members have been suspended for non-payment of dues. Some of our members have the impression that they can drop out of the Association at any time by refusing to pay their dues. By referring to article XVI of the by-laws, they will find they are mistaken, as no one can resign who is not in good standing.

Very truly yours,  
Winchester, Ind. P. E. GOODRICH, Secy.

**RATE FOR UNLOADING GRAIN.**

An order-in-council, approving of rates for unloading of grain at Montreal, has been published as follows:

"On grain ex steamer or barge:

"Elevating into elevator and weighing, one-quarter of one cent per bushel.

"Storage for twenty days, including delivery to vessel, one quarter of one cent per bushel.

"On grain ex cars:

"Oats, elevation and ten days' storage, one half of one cent per bushel. All other grain, elevation and ten days' storage, three-quarters of one cent per bushel.

"Succeeding term of ten days, on all grain ex steamer, barge or cars, one-quarter of one cent per bushel.

"Loading on cars, one dollar per car.

"Cleaning grain, one-half cent per bushel.

"Turning grain, one-eighth of one cent per bushel.

"Winter rate (November 15th to May 15th), one and one-half cent per bushel.

"On grain floated from elevator to alongside steamer in harbor, five-eighths of one cent per bushel."

A car of new No. 1 Northern spring wheat was received at Chicago on August 22, and sold at 76½c.



[For the "American Elevator and Grain Trade."]

## RIGHTS OF SELLER WHEN DRAFT IS NOT PAID AS AGREED.

BY J. L. ROSENBERGER,

A Member of the Bar of Chicago, Ill.

A commission company sold and contracted to deliver to a grain company 10,000 bushels of corn in the car on the track. In part fulfillment of this contract, it placed a car of inspected corn on the track and drew a sight draft upon the grain company in favor of a bank, to which draft it attached the bill of lading and inspection certificate, and delivered them to the bank at about noon and received credit for the amount of the draft. A messenger of the bank, for the purpose of presenting the draft for payment, called at the office of the grain company between 1 and 2 o'clock p. m. No person being in the office, he left a note, calling attention to the fact that such draft was held by the bank. Between those same hours the cashier of the grain company returned to the office, found the notice, and telephoned to the bank and to the commission company to ascertain if the draft was a cash item. Being informed that it was, she then drew the firm's check on another bank in favor of the payee bank, caused it to be certified, and called at the payee bank after business hours to take up the draft. The doors were not closed, but the cashier of the bank told her that the commission company had taken up the draft, the bank at the close of banking hours having called up and informed the commission company that the draft had not been paid, and that it must take it up. The next morning the cashier of the grain company secured a certified check payable to the commission company and presented it to the latter, which refused to accept it, and thereafter refused to deliver any more corn.

Under these circumstances, the Supreme Court of Kansas holds, in an action (Bennett vs. Taylor, 84 Pacific Reporter, 533) brought by the grain company to recover the damages resulting to it from the nondelivery of the corn contracted for, that it was error to instruct the jury that if the buyer on the following day tendered to the seller the amount of the draft and requested a delivery of the bill of lading and certificate and the seller refused, the neglect of the buyer to take up the draft on presentation was not a forfeiture of the contract and the seller would be liable for damages for nondelivery of the corn. It says that by such instruction the District Court extended the time for payment beyond that expressly agreed upon by the parties. It is beyond the power of a court to put conditions, limitations or extensions on the explicit terms of a contract. If the terms of the contract are definite and certain, the court must leave the parties where they have placed themselves by their agreement. If the grain company wished time after delivery to make payments, it should have caused such condition to be made a part of its agreement. Having admitted that the agreement was that it should make such payment on demand, the court could not extend the time or insert other conditions in the agreement. If it could extend the time within which the buyer might pay for the corn beyond the time expressed in the agreement, it could, by the same rule, extend the time within which the seller might make final delivery.

By the agreement of the parties in this case the draft was payable on presentation, provided it was accompanied with the bill of lading and certificate of weight and grade. If the draft was not paid on that day, it became dishonored and would be charged back, either to the account of the drawer or transmitter. In this case, after dishonor the drawer was requested to take up the draft, which it did, and the bill of lading, which was the title to the corn, was returned to it. Thereafter it was not required to hold the corn subject to any subsequent order of the grain company, but might im-

mediately dispose of it. The grain company, having failed to meet its obligation under the contract, forfeited all right to insist upon a delivery of the corn, or to recover damages for a nondelivery of the corn.

## SOME ANCIENT GRANARIES.

Accompanying his "Notes on British Mills and Milling," the author, Mr. J. A. Hunter, sent us two interesting pictures, which we reproduce herewith. The first is a view taken at Kirkless



AN OLD ENGLISH GRANARY.

Priory, Eng., and shows a granary at least 900 years old. It is said that Robin Hood, the heroic outlaw, who for centuries was a sort of idol, a second Frederick Barbarossa, among the lower classes, died here, discharging his last arrow from one of the upper casements.

The second picture is another monastic barn or



A MONASTIC GRANARY.

granary. It is located at Hall Garth, Durham, and while probably not so old as the other, is old enough to go back to the times of the Plantagenets, at least.

The Canadian commissioner, or consul, at Leeds, England, reports that "so-called Canadian wheat is being shipped from New York to Hull in a doctored form, and adds that for this reason Hull importers will only buy Canadian wheat on sample." A leading importer is quoted by the commissioner as saying that "Canadian wheat does not come up to the quality it is stated to be when it arrives in this port, and therefore causes dissatisfaction to the buyer."

## OKLAHOMA'S GRAIN STORAGE LAW.

C. V. Topping, secretary of the Oklahoma Millers' Association, in view of the practice of many of the mills and elevator men over the country of storing wheat for farmers, calls their attention to the fact that the law is very strict in regard to this, the legal definition of a public warehouse being as follows:

"Public warehouses shall embrace all warehouses, elevators and granaries in which grain is stored in bulk, and in which the grain of different owners is mixed together and in which grain is stored in such a manner that the identity of different lots cannot be preserved. The proprietor, lessee or manager of any public warehouse shall be required, before transacting any business in such a warehouse, to procure from the district court of the county in which such warehouse is situated, a license permitting under the laws of this territory.

"For a public warehouse with a capacity not exceeding 100,000 bushels, a bond of \$25,000 must be given; and for over 100,000 bushels' capacity a bond of \$40,000 must be given.

"All proprietors or managers of public warehouses in this territory shall keep posted up at all times in a conspicuous place in their office and each of their warehouses a printed copy of this act.

"Any person or persons who shall transact business of public warehouses without first procuring a license and giving bond as herein provided, or who shall continue to transact such business after such license has revoked or such bond shall have become void, shall be guilty of a misdemeanor, and upon conviction shall be fined in the sum of not less than \$100 and not more than \$500 for each and every day that such business shall be carried on.

"Any violation of any of the preceding provisions of this act (except section 6) by any warehouseman, owner or manager of any public warehouse created by this act, is declared a misdemeanor and upon conviction shall be fined not less than \$1,000 and not more than \$5,000, one-fourth of which fine to be paid and awarded to the informer of such misdemeanor."

## FREE SEED FARCE.

Although defeated at the last session of Congress, the seed dealers have decided to renew their fight upon the annual seed distribution from Washington. In an open letter to the public, President Henry W. Wood, of the American Seed Trade Association, points out that the total packet seed trade of the country amounts to 120,000,000 packets, of which the government gives away 40,000,000, and the dealers sell 80,000,000, and asks, "What industry could survive if the government gave away free half as much as those engaged in the industry sold?" He also suggests sarcastically, but not unfairly, that it is time for Congress to change off and give away axes, saws, pocket knives and looking glasses, and give the poor seed merchants a rest.

The American Seed Trade Association is composed of growers, wholesalers and retailers and is thoroughly in earnest in its opposition to government interference in its business. The Wholesale Seedsmen's League also is working against the annual distribution. Between them they are in touch with about ten thousand persons engaged in growing and selling seeds, and with at least fifty-thousand store keepers who carry seeds in stock.

The campaign of education is to be carried on by communication with individual buyers, the granges and other organizations of farmers.

I think the "American Elevator and Grain Trade" is one of the most useful of journals. You will find my name in the list for the last two years.—K. Klein, N. D.



### BELL OF WINNEPEG IN ENGLAND.

Secretary Chas. N. Bell of the Winnipeg Grain and Produce Exchange returned recently from England, whether he had gone to attend the sixth annual congress of the Chambers of Commerce of the Empire, held in London on July 10-13.

Speaking to a local paper, he said, among other things, that "over 3,000 arbitrations in connection with grain disputes were considered last year under the rules of the London Corn Exchange, but not one of these, even remotely, concerned Manitoba grain, and that the inspection system in force west of Lake Superior was, in British buyers' opinion, the best in the world and faithfully and honorably carried out."

Mr. Bell was informed that there was a strong feeling prevailing among the members of the grain trade in London in favor of refusing to recognize any grain certificates or grading other than on samples or standards chosen by the British chambers themselves; but that even among those strongly advocating this movement there was a desire to exempt Manitoba certificates from this rule so long as they continue as satisfactory as at present.

### ELEVATORS FOR STORING RICE.

The use of Western grain elevator methods for the handling and storing of rice in bulk develops but slowly in the rice districts of the Gulf littoral, but every year or season shows some further inroads upon the old method of handling in bags only. The experience of the practical rice millers with the use of the elevator has thus far been highly satisfactory, as would appear from the statements of a practical rice man made some months ago to a representative of the Rice Journal. Among the immediate advantages of the elevator over the sack system of handling rice, this expert says, are (1) "the saving of the bags and twine; (2) the labor of sewing, loading and unloading of wagons, the saving of damp rice; and (3) in putting the rice in condition for market. For instance, in starting a thrasher a few bags will come out badly thrashed, or a belt will slip, or if it is an old thrasher it will leave on the stems, thereby causing the rice to weigh light in the test measure, and the grader will make three or more grades out of the same kind and quality of rice.

"He does not claim that an elevator will remove all defects, but does claim it will enable one to get rice in a first-class condition to mill and sell.

"Again, he says, any first-class grader can grade rice into round lots of any size and make a uniform, even grade if he has sufficient stock to select from, thereby doing away with the little lots of 100 to 300 bags, giving the mills 6,000 to 10,000 bags of one kind and grade. You will find in nearly every well equipped mill a mixer or blender, to mix rice, to make a grade, after it has gone through a process of milling. These folks are not able to get the results they would have gotten had the rice been properly graded and blended and dried in the rough, and you will always have round lots to offer. A miller can go to an elevator and buy a bin of rice, and it is bound to be absolutely even and uniform in temperature and not as now, one bag damp and another medium or dry.

"The elevator system makes milling easy and makes the farmers money. Take the cost of the bags, time and labor, to say nothing of the waste and ratage, and see what it amounts to per year; then figure your losses by grading and you will find that you can nearly build a 100,000-bushel house every year to handle that amount of rice and an elevator would last twenty-five years in constant use.

"Another question that comes up is the question of wagon beds. To start with it is not neces-

sary to bring the rice to the elevator in bulk, though, of course, it is a great deal more convenient. Farmers can borrow, rent or buy sufficient sacks to haul the rice to the elevator, empty them out and carry them back for refilling, thereby using the same sacks over and over several years. Still, sacks are unnecessary when you have a good wagon.

"The item of insurance is quite a great one. Where an elevator is run in connection with the mill the elevator can stand 150 feet from the mill and spout to it, or take it to the mill in a conveyor. Ordinarily 100 to 150 feet is a sufficient distance to get a low rate of insurance.

"Elevators can be constructed of iron, concrete or wood. For conditioning rice there is nothing that will equal wood. Wood will absorb moisture and allow a free circulation of air which cannot be done with concrete or iron. No matter how damaged or moist rice is, it can be put in good milling condition as far as dampness is concerned,

### E. F. VERRY & SON'S NEW ELEVATOR, AT ARMINGTON, ILL.

In the June issue of the "American Elevator and Grain Trade" was displayed the plans for E. F. Verry & Son's new elevator at Armington, Ills. Herewith is a halftone of the completed elevator, office and power house.

As stated in the June issue, this contract was let about May 10, and completion of the building was promised for August 1, but the Burrell Engineering & Construction Co., the contractors, succeeded in finishing the job one week ahead of time, final settlement being made July 31.

Another interesting feature to the reader is the fact that while the estimated cost was \$11,000 the actual cost was about \$100 less; and as the job was done on the percentage basis, the owners saved that amount of money more than they would have had they let the contract for the estimated cost.



E. F. VERRY & SON'S ELEVATOR AT ARMINGTON, ILL.

and by a system of airing and drying, can be made to test the required amount of not less than forty-two pounds to the bushel. Without the elevator it would have only tested thirty-four pounds. Of course there would be some slight loss in cleaning, but it is more than made up in the difference in value."

### DOCKAGE IN MINNESOTA.

In order to protect themselves from the expense of handling the dirt brought in by farmers with their wheat, grain buyers in Minnesota have adopted the recommendation of the inspection department, and now require their agents at country stations to apply what is known as the 'sieve test' to each and every load of wheat bought. Heretofore the buyers have used their own judgment in determining the amount of dockage, but hereafter they must first obtain a uniform sample from each load, carefully weigh it, then sift it absolutely free of dirt and other foreign substances, reweigh the cleaned sample; and then, "on a basis established by the inspection board," they are to determine the exact amount of dockage to be taken.

Send us the grain news from your neighborhood.

The size of the elevator is 36x42 feet on the ground and 80 feet high. The equipment is as follows: One 25-horsepower Fairbanks Gasoline Engine, one 500-bushel hopper scale, one Mattoon Grain Car Loader; two Burrell Distributors with steel spouting to all bins, two elevator legs with 14x6-inch cups, two sets of dumps, all of which machinery was furnished by The Burrell Manufacturing Company and the Skillin & Richards Manufacturing Company. The elevator was designed and built by the Burrell Engineering & Construction Co., of Chicago.

Warden A. F. Kees of the Washington state penitentiary says the way to smash the grain-bag trust is to increase the penitentiary product. The state has manufactured grain bags this year at a small profit and furnished them to the farmers at 6½ cents, while the local market has quoted 11 cents for the foreign product. He says there will be no difficulty in having at all times a force sufficient to operate 160 looms at the penitentiary, which would increase the capacity of the prison jute mills from 1,800,000 bags to 4,000,000, which would be sufficient.



## EFFECT OF SULPHUR FUMIGATION ON CORN AND BARLEY.

The matter of fumigating grain cargoes arriving from plague-infected ports is, of course, a living one always at European ports of entry; and the effect of such fumigation upon the subsequent condition and value of the grain is a matter of much concern to grain receivers abroad and to millers. By reference to the August number of the "American Elevator and Grain Trade" the reader will find on page 70 an account of the methods employed and also the effect of the fumigation upon wheat and flour. Below are given the results of the experiments of the medical office of the London Local Government Board as ascertained upon tests with corn (maize) and barley, when subjected to the same tests as given to flour and wheat. The Report says:

### EXPERIMENTAL FUMIGATION OF BARLEY AND MAIZE.

"I have already stated that the maize employed in the present series of experiments was so infected with weevil that it was impossible to make trustworthy germination tests. By the end of the series it had been exposed to weekly or bi-weekly fumigations for upward of three months, but beyond losing the weevil, from which it was now quite free, it had apparently undergone no alteration.

"The conclusion was confirmed by commercial experience. The corn, which was Indian, was bought early in March at 21s 6d per quarter, and was finally sold in September, in open market, at 20s per quarter. The buyers were aware that it had been used for the purpose of these experiments and had been therefore fumigated with sulphur dioxide many times. It may therefore be taken that maize, whether in bags or in bulk, would not be damaged commercially by a single ordinary fumigation.

"The barley was Russian, from a Black Sea port, and I followed the action of the gas upon it by successive germination tests. Some of these tests were made on samples taken from a bag next the central animal cage, while other samples were taken from various parts of the experimental cargo when it was finally unloaded. The results of these germinations are shown in the following tables:

#### GERMINATION TESTS ON FUMIGATED BARLEY.

i. Sack in Middle of Cargo by Central Animal Cage.				
No. of Fumigation.	O.	I.	II.	V. Final.
Full growth.....	88	81	77	58
Feeble growth.....	2	0	0	1
Dead.....	10	19	23	41

ii. Final Samples from Various Parts after Many Fumigations.				
Bags.			Bulk.	
Near Bulk.	Near Cage.	Near Inlet.	On Mats Above Bulk.	Under Hatch Near Bulk.
Full growth.....	63	42	88	81
Feeble growth.....	2	5	2	0
Dead.....	35	53	98	16

"The difference in the power of resistance of barley and wheat is very extraordinary, and is presumably to be attributed to the comparatively great thickness and impenetrability of the outer cellulose layer of the barley grain. The practical absence of damage was again confirmed by commercial experience. The barley was bought early in March at the same time as the maize, at 17s 3d per quarter, and was sold in September in open market at 17s 6d per quarter, the buyer again being fully aware of the treatment to which it had been subjected. It is clear, therefore, that the effect of a single fumigation on the germinating power and commercial value of barley is negligible, and that no appreciable damage will be done in the course of an ordinary fumigation except, perhaps, to sacks in the immediate neighborhood of the gas inlet.\*

\*I was unable to confirm my previous result that barley which was initially apparently unaffected by exposure to sulphur dioxide eventually, in the course of a few months, lost its germinating power. I tested several of the above samples after an interval of three months, but found substantially the same percentage of the grain to germinate as immediately after the fumigation. I must therefore conclude that the slow sterilization of the original sample on which this conclusion was based was due to some other cause than the action of sulphur dioxide.

Sedgewick Smith of Aberdeen, S. D., has built a number of portable granaries, using drop siding and shingle roofs. They are dry and tight, and hold about 500 bushels. Instead of resting on the ground they are sustained by four heavy runners made of 4x6 timbers, fastened to the bottom. The structures are taken into the field and the grain put directly into them from the separator

and there kept until it is desired to market it, when it will be loaded into wagons and taken to the elevators. With three or four of these granaries the average crop on the ordinary farm can be easily accommodated, and as teams are very scarce this year a great saving in the expense of immediate hauling will result from this method.

[From the "American Miller."]

## WINTER WHEAT CULTURE IN THE FAR NORTH.

BY R. JAMES ABERNATHEY.

Professor Shaw seems to be surprised at the successful culture of winter wheat in Alberta, without giving any reasons for his surprise. The fact is, the professor is looking at the matter from a purely scientific-theory point of view without reference to the commonly called horse-sense view of the situation, based upon observation and developed facts. Scientific theory is no more to be depended upon than any other theory and often is not as practical as the common-sense sort.

A little incident will illustrate: A party of engineers, scientific engineers, were prospecting for minerals and had sunk a large-sized shaft about twenty-five feet deep, when at a moment of inquisitive leisure, one of the work mules tumbled in on a tour of inspection. Being a mule, he was little the worse for the tumble, but the question was how to get him out. The scientific engineers concluded that an incline would have to be dug, reaching to the bottom of the shaft, and so returned to the calculating room to determine the greatest possible angle or steepest incline that the mule would be likely to walk out on, what distance away from the shaft to commence to dig, etc. The workmen, good horse-sense fellows, also had theories, and while the engineers were performing the arduous task of establishing grades, inclines, angles, etc., they proceeded to rig up a derrick out of material mostly on hand where such work is going on, and by the time the engineers had completed their calculations and returned to the works, these fellows had the mule elevated and landed safely.

Now the fact is, the far northern country, the country of perpetual winter snow, is the natural home for winter wheat of the right variety. In probably nine times out of ten it is far more certain as a crop than spring wheat, and also for another reason that ought to be apparent to any man with the least knowledge of wheat culture. The wheat is planted in the early fall, with the assurance of continuous snow protection and practically no freezing. The weather probably never gets cold enough, even as far north as Alberta, to freeze the ground under a two-foot bed of snow.

Now, is it necessary for the wheat to sprout or come up in the fall before the snow comes? It has been demonstrated in Kansas that hard wheat will lay in the ground unsprouted all winter, sprout in the spring, unless the ground is too dry, and make a full crop. In a country clad with snow the winter through, there is an abundance of moisture when the snow melts away, and sunshine only is needed to quickly bring to life the dormant wheat already in the ground. The winter wheat in the same locality will be under way before the spring wheat is in the ground. The spring wheat raiser must wait until the snow is all gone and then wait until the ground is dry enough to loosen it up and prepare it for sowing, at the same time often being harassed by lots of snow or rain, so that at best his spring wheat is about three weeks behind the winter by the time he gets it in the ground. As it takes spring wheat as long to mature as it does winter wheat, the spring wheat is about three weeks later in maturing and that much likelier to be caught by early frosts in the far north.

The state of Nebraska supplies a magnificent object lesson. For many years it struggled along in an effort to succeed in spring wheat raising. Like Professor Shaw, they thought they could

not grow winter wheat. But they have learned better. Nebraska is now a winter wheat state and is forcing its way to the front as one of the great wheat producing states. Why the Dakotas do not profit by the example of Nebraska is one of the strange things. But it is only a question of time when they will do it. They have had many struggles with spring wheat, resulting in many partial failures. When they adopt a hard, hardy variety of winter wheat, partial failure of crops will be far less frequent.

Iowa and northern Illinois could probably grow hard winter wheat more successfully than spring wheat, but snow protection is not so dependable as in the states west and north.

## HOW JONES GOT THERE.

Mr. Jones, the crop expert, visited this office last week. We were glad to see Mr. Jones and offered him every inducement to sit down, says the editor of the Record at Grafton, N. D. He finally sank into a bunch of exchanges and after getting a little Northern Pacific dirt out of his throat exclaimed that he was always glad to get into the country printing office, where real type was used and the smell of ink wasn't confined to the basement, but was allowed to wander all over the building like a cash subscriber.

Mr. Jones got his start in life by setting type on the Brush Prairie Review, published on section 56. It was a rural paper, and the office faced a wheat field in summer and a snow bank in winter. While spacing out a line he would glance out of the window on a bright August day and estimate the crop. In this way he became a good estimator. Some years ago the owner of the threshing machine would take his estimate rather than the machine measure when making out his threshing bill. When copy was short and the job hook empty, he would walk around a little and estimate the yield for some of the other farmers who took the paper and occasionally laid a cabbage or dozen eggs on the editor's desk. His estimate generally proved satisfactory unless the granary leaked or the threshing machine was in poor health and did not separate properly.

Mr. Jones soon left the Prairie Review to edit the market page of a city daily. His work was always well done and his tips worth going miles to get. The wheat and stock market are very sensitive and are affected by the heat and cold, especially the cold blooded speculator, and a man has to have a revolving office chair and a well-pointed lead pencil to keep up with the sudden changes. Mr. Jones doesn't believe in remaining in the third story of a valuable city block and getting the reports of the growing crops from the wire or train crews, but for many years has gone out and personally felt of the crop and hotel food at the traveling men's table. He finds that North Dakota, this year, has been doing business at the old stand, and will raise enough wheat to keep dust on the miller's clothes for some time. In a few days the threshing machine will be throwing straw in the air and emptying wheat in the grain box, and the truth will come out, like noise in the night when pa steps on a tack and drops the baby on the hardwood floor.

First sales of new yellow corn of the year were made to Baltimore on September 7 for shipment this year. The grade was No. 3 yellow, and it was sold by John J. Stream.

The report issued by Chief Grain Inspector David Horn of Manitoba shows that during the crop year ending August 31, 1906, 65,850,000 bushels of wheat were inspected, compared with 39,000,000 the previous year. This is the highest total in the history of western Canada, the previous record being in the crop year ending August 31, 1902, when 53,700,000 bushels were inspected. Of last year's inspectors, other grains were: Oats, 6,921,000, and barley, 1,400,000 bushels.



[For the Wisconsin Grain Dealers' Association.]

### WISCONSIN BARLEY.\*

BY PROF. R. A. MOORE.

Barley is classified commonly as two-rowed, four-rowed and six-rowed, the six-rowed barley being grown most extensively in Wisconsin. In general, the barleys grown in Wisconsin are bearded, but some of the beardless and hulless varieties are also grown. These have not, as a rule, given general satisfaction.

No cereal admits of so wide a distribution and is so generally grown throughout the world as barley. It is not only a good market crop, but one of the very best to use with grass seed in a rotation of crops.

**USES.**—From the very earliest times, barley was grown throughout the old world as a human and animal food and is yet used quite extensively; the Arabians use it largely as a food for horses. We use it for feeding and brewing purposes, and only to a very limited extent as a human food. We have not as yet learned its full value as an animal food, and as soon as we do, this important cereal will be grown more extensively. On the Pacific slope barley is fed almost exclusively to horses, while in Wisconsin very little is used for that purpose. It makes one of the very best feeds for hogs and poultry, and all discolored barley should be marketed through farm animals instead of being forced upon the market for brewing purposes.

Wisconsin ranks as one of the foremost barley states, growing annually approximately fifteen million bushels, valued at seven and one-half million dollars. North America produces one hundred and seventy-nine million bushels, of which the United States grows over two-thirds. The yield per acre of the United States for 1904 is 27.2 bushels, while that of Wisconsin for the same year is 30 bushels per acre. There is no reason why Wisconsin cannot produce 40 bushels per acre if we but pay attention to the proper selection of seed grain, followed by the right care and cultivation. The department of agronomy of the Experiment Station is putting forth its utmost endeavors to bring about this increased yield by breeding higher producing barleys. For seven years the work has been in progress and a high yielding variety of Manshury was disseminated throughout the state the past winter in time for the spring sowing. I am looking forward with considerable interest to note the results obtained from this barley.

We have another barley that I regard superior to the improved Manshury and that is the Oderbrucker or German barley. This barley was obtained from Germany by Professor Zavitz of the Guelph (Ontario) Station, and sufficient was secured by the Wisconsin Station in 1899 to sow one-twentieth of an acre. This was carefully graded and selected and compared with twenty other varieties. We find at the station farm that the Oderbrucker barley is one of the most satisfactory varieties grown, holding its own in point of yield with the improved Mansbury and showing other qualities such as stiffness of straw and rust resistance, that are superior to any variety on test. One of the characteristics of this barley is its very high protein content, which, as we know, is desirable if the barley is used for feeding farm animals, but we are not so sure when it is used for malting purposes. It seems to be the prevailing opinion of maltsters that barley having a protein content of about 8 or 10 per cent is preferable. The Oderbrucker has a protein content of 15 per cent, or nearly double the amount in barley thought to be most desirable for brewing purposes. This fact made me hesitate about introducing the barley in general throughout the state.

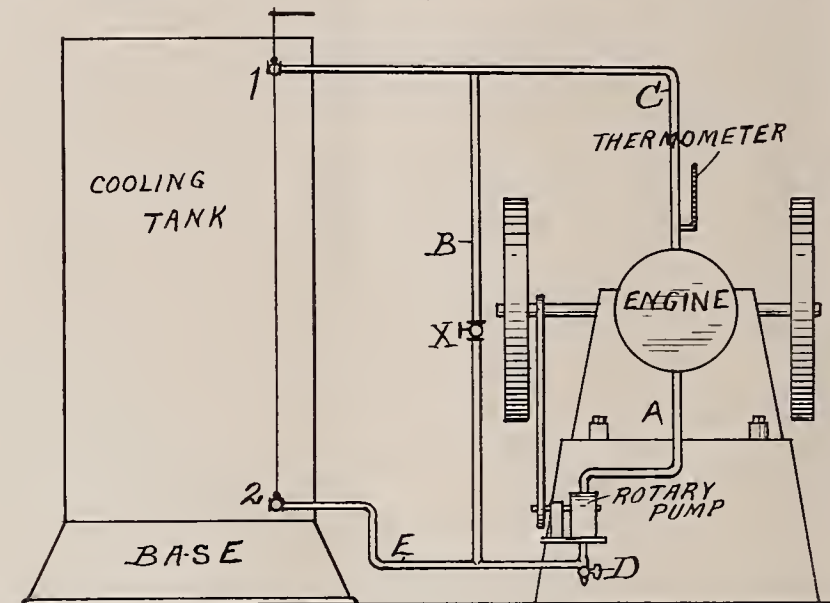
From extensive tests made at the Experiment Station with over twenty varieties of barley, I am thoroughly convinced that the six-rowed bearded barleys are the varieties to emphasize in this state. In point of yield and strength of straw, the six-

rowed barleys surpass all other barleys. The beardless and hulless barleys have been very unsatisfactory on the station farm and the two-rowed varieties have lodged so badly that it was very difficult to harvest them. The two-rowed varieties surpass the six-rowed in plumpness of berry and often in weight per measured bushel, but we cannot sacrifice high yield and stiffness of straw for those requisites.

Three-fourths of the barley of Wisconsin is grown within the borders of six counties, and the farmers in these counties regard it as one of their most substantial crops. We should not only encourage a greater yield per acre of barley, but should encourage the growing of a larger acreage as well and in some sections of the state to the exclusion of other crops.

In some of the southern counties of the state oats have been grown so long and extensively that the ground has become contaminated with the rust spores to that extent that good oats and heavy yields are a thing of the past. Beautiful barley grows on this rich, loamy soil, and I feel this is the crop that should become general.

I often feel that a sad mistake is being made on the part of the farmers by attempting to grow several varieties of barley in each and every community. I think as farmers we should secure the very best variety of barley possible and stick to it.



The fact that the Manshury barley was introduced and grown so extensively in the barley sections is what has given Wisconsin her reputation as a barley state. The old Manshury barley has deteriorated and to a great extent lost its identity, hence the desire for the introduction of the improved.

At this time, when it seems the popular thing for a farmer to replace his six-rowed variety with beardless, hulless and two-rowed varieties, I advise caution.

It seems very essential that whole communities should grow the same varieties of grain in order to get the best market price.

When a grain shipper can purchase several carloads of a single variety of oats, peas, wheat or barley, he can pay a better price than if forced to put several varieties of a single cereal in a car. This point should not be overlooked, as it is the few cents over the cost of production of a bushel of grain in which the farmer is interested. Whole communities living in sections of the state that are especially desirable for growing certain grains and forage plants should emphasize these certain varieties as specialties and grow them in such quantities that those certain counties or parts of counties will become known far and near for the specialty. This will aid both the farmer and shipper and make it desirable for all concerned.

To summarize, I will say that the department of agronomy of the Experiment Station is interested in breeding the very choicest varieties of grains and forage plants, and disseminating and encouraging their growth in those sections of the state especially adapted for their culture. We desire also to have whole communities grow cer-

tain varieties rather than a few individual farmers. In this great work of introducing and encouraging the growth of pure-bred seed grains and encouraging the elimination of grain diseases in general, we ask our hearty co-operation.

### IMPROVED COOLING ARRANGEMENT FOR GASOLINE ENGINES.

The main advantages of the cooling system which I describe here are, that the water can be kept at almost any desired temperature, that the temperature may be easily changed without changing the speed of the pump, and that the engine is very quickly brought to its normal running condition in cold weather.

Anybody who has operated gasoline engines in cold weather knows that in starting up a gasoline engine on a cold morning, especially if it be a throttling engine, that it will be all the way from 10 to 30 minutes before the engine will be running steadily, giving its full power and using the correct amount of gasoline with the right number of explosions for the work being done.

The sketch shows the tank, engine and pump, with the necessary pipes. The water flows through the pipe E, on through the pump and pipe A, through the engine cylinder and out at the pipe C. The difference, however, between

this system and the ordinary one is that there is a pipe B connecting the pipes E and C, and which has a valve about half way up. Now, it will be seen that when water is turned on through valves 1 and 2 in the tank, after the engine has been started, that if the valve be opened the hot water coming out of pipe C will circulate back to the cylinder through pipe B, thus warming the engine up much quicker than would be possible if it were all allowed to go back to the tank and the inlet be supplied with cold water all the time.

Now, as the engine warms up, the valve X may be gradually closed until the pump takes its supply direct from the tank. A small water thermometer, costing about \$1.50, may be screwed into the pipe rising from the cylinder, and the temperature may then be known at a glance. The water in a gas engine should leave the cylinder at a temperature of about 160 degrees Fahrenheit, which is about as hot as can be borne by the hand.

If one wishes to avoid the trouble usually experienced with the shut-off valves next the tank, extend the pipes about a foot into the tank, screw the valves on the ends of the pipes and run a rod to the top of the tank to open and close them by. As rotary pumps are usually supplied with a needle valve to let the water pass the check valve in the base, by supplying a drain cock at D the whole apparatus may be drained by opening this valve and X and the needle valve in the pump and closing the valve at 1.

Wm. Bishop, a rancher near Garfield, Wash., reports 100 acres of oats that thrashed out 16,000 bushels.

\*This article has been in type for some months, awaiting publication. It should be read in connection with Mr. Moore's article on pp. 74-75, August issue.



## TRANSPORTATION FROM A SHIPPER'S POINT OF VIEW.

[From a paper by H. E. Kinney of Indianapolis at the annual meeting of the Indiana Grain Dealers' Association, at Indianapolis, on January 17, 1906.]

To the local elevator man, or what we usually term "country shipper," the question is one of elevator location, leases, etc. The transportation companies have generally formulated what would seem to be a very unfair lease—where from necessity the elevator, or warehouse, must be built on company land—forcing the lessee to waive all rights of action against the lessor for neglect or refusal to perform its duties as a common carrier, thereby minimizing the value of the lessee's investment and destroying its use as collateral, or basis of credit, by imposing upon the lessee obligations which are almost impossible to carry out, such as confining of shipments to that particular road, right to cancel lease on short notice, release themselves from liability of fire or other damage caused by the acts of their employees, control of all tracks connected with such houses and business, and at will to designate them as regular team or hauling tracks, in this way retarding the use and value of elevators, built at great cost to the shipper, for the use and benefit of the railroad. The state Railroad Commission should be empowered by our legislature to pass upon the equities of the railroad company and the elevator owner, where elevator is built on a railroad company's land.

Shippers who furnish elevator and storage facilities for railroad use, located either on private ground or on railroad land, should be allowed compensation for the storage of grain or other commodities pending the arrival of cars ordered for carrying such property.

We most heartily recommend the legalizing of demurrage charges (making the same reciprocal), covering delays in handling at terminal points, especially the switching and delivery of cars; defining what should constitute a reasonable time for service of a general and usual character; compensating the shipper and the carrier alike for all delays. We would also recommend a law to simplify the recovery of damages suffered by shippers from deterioration and other losses occasioned by failure properly to handle consignments in carloads.

We would urge most earnestly the Interstate Commerce Commission's attention to such rules, or laws, as will cover unusual delays in the handling of interstate traffic; defining reasonable time for delivery, and safeguarding in some way the shipper of perishable goods as the humane laws protect the shipper of live stock. When the railroads accept our perishable corn and have full knowledge of the damages attending delay, they should be compelled to protect delivery; and where delivery cannot be made, run it into an elevator and have it handled as carefully as they would live stock that has been on the road an unreasonable time. Our grain, when perishable—as new corn always is, and conditions are well understood by traffic and transportation officials—deserves a care never given it; and when accepted for transportation the carrier should accept responsibility of caring for it in a reasonable way. There is no plausible excuse for consuming five to ten days, here in Indianapolis, in switching cars of new corn to an elevator for handling and by such delay cause ruin of the property. Neither is there any excuse for allowing cars to stand on sidetracks for weeks after loading or to be set out of trains, causing grain to rot, the officials refusing or neglecting to locate it by tracing.

The railroads have specialized almost every line of service—four-day stock trains to Boston from Indiana and Illinois points, as well as fresh meat trains on the same schedule; three-day merchandise trains from New York to Indianapolis, with eight-hour trains between Chicago, In-

dianapolis and St. Louis for merchandise. At the same time they give us fifty-day trains for new corn to Boston, forty-day trains for New York or other eastern points, when cars are carded "New corn, perishable, must not be delayed." These are not exaggerations. Any of us can cite this season cases of fifty days to seaboard when carriers accepted our corn as perishable and gave assurance that it would go through in ten days. We are deserving of better things. We must demand them.

Rules effective on some roads compel agents, in billing cars, to bill at marked capacity of car, regardless of amount loaded; others at 10 per cent over marked capacity. Some roads demand loading to 10 per cent over; others at even marked weight; and some roads practice a system of raising weights on shipments of grain two to five thousand pounds above contents to insure them full revenue from connecting lines. The result is, overcharges of all descriptions on domestic shipments and long, tedious delays in their collection. Some remedy must be had. Claims for loss or damage in transit are always long-time ones, frequently refused on purely technical grounds. Litigation being expensive, many smaller shippers are powerless to protect themselves, while the larger ones often get claims of all descriptions honored promptly as part of their compensation for business, which is only another name for a rebate or concession.

The grain dealer is willing always to pay fair rates. No one complains of the charges prevailing at present, but we do object to frequent changes and the uncertainty as to what the rate will be three or ten days hence. Being a business almost entirely transacted on a future shipment basis, the matter of rates is important; not that they be low or high, but that they remain steady. The issuance of a "midnight tariff," so called, should be a crime. We would recommend that rates during regular seasons for movement of crops be not lowered or raised at all, making changes affect only summer and winter schedules, and in no case a change on less than thirty days' publication.

The grain dealer, as well as other large shippers, is just now inclined to look for redress from all wrongs (either fancied or real) to the state Railroad Commission recently established. We may expect some disappointments, as our business is too largely of an interstate character and many of our complaints are outside of its jurisdiction. It is, therefore, most desirable that intimate relations be established between the two commissions so that united action between state and interstate may bring the results so much needed.

## CANADIAN GRAIN COMMISSION.

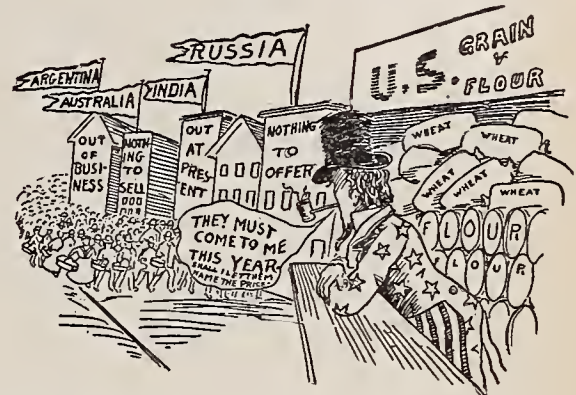
The Canadian Grain Inspection Committee recently appointed by order of parliament began its session at Winnipeg on August 29. J. W. Miller of Indian Head is chairman and J. B. Boyle of Edmonton, secretary, besides whom W. L. McNair of Keyes, Man., and Geo. E. Goldie of Ayr, Ont., are members.

The advertisements of the Commission of the date of the sittings advise all those who have any complaints to make that the Commission will hear them. The Commission is granted power to consider all matters connected with the grain inspection act and the Manitoba grain act, and in connection therewith to visit grain growers, elevators all over the wheat growing region, investigate the methods of handling grain at the various stations, farmers' elevators as well as companies' elevators, the distribution of cars, methods of dealing in grain at Winnipeg as well as at Toronto and Montreal, and the system of government inspection and collection of fees, the selection of grades, methods of handling grain at Fort William and Port Arthur and at other lake ports and at Montreal, St. John and Halifax. The Commission-

ers have power to summon anyone before them, who may be of assistance in helping them to arrive at necessary facts in adjusting irregularities, or in personally inspecting elevators, and grains; in fact, to take any legitimate action that will enable them to obtain any facts they desire to know connected with the grain business in the Dominion.

From Winnipeg the Commission went East and will inspect the elevators at the lake ports and the facilities for exporting grain at the St. Lawrence ports, returning to the West later.

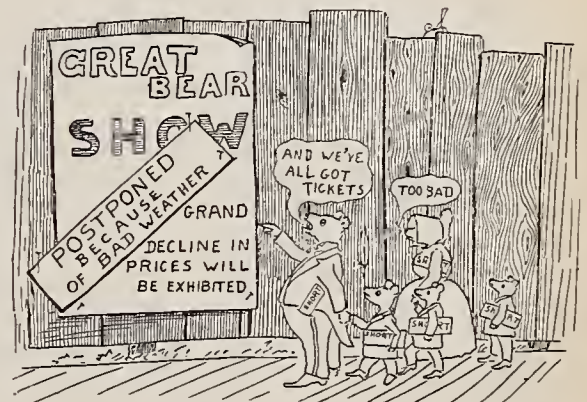
## THE WAY ZAHM LOOKS AT IT.



Uncle Sam has the goods.

Argentine, India, Australia and Russia haven't much to offer.

Will our farmers or the foreign buyer dictate the price?—Zahm & Co., August 18.



Postponed account bad weather. The "whole d— family" (of bears) expected a picnic this week, but rains Northwest and Southwest caused a change. Will they have their "picnic" next week?—Zahm & Co., August 25.



The bull would like some of that load taken off. Will the foreigners cable Mr. Exporter to take all or at least a part, and let the bull work "prices" up? Or will he wait until the Manitoba crop is put on to the bull's ship and cause it to sink to a lower level?—Zahm & Co., September 8.

The latest edition of Secretary Wells' Directory of Regular Grain Dealers of Iowa is just out, dated July, 1906.

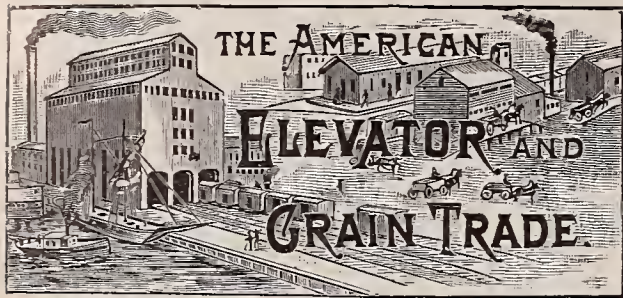
Through the new rate law the first grain ever shipped from South Dakota to Omaha, Neb., appeared early in September.

There is a movement among the grain buyers of Alberta in favor of a system of local grading for all grain which is being shipped east.

Baltimore received her first car of new spring wheat on August 31. It was shipped from Grafton, N. D., and a fine specimen of the new crop.

Oklahoma shippers expect to be forced to pile corn and wheat outside their elevators, as in recent years, owing to big crops and lack of cars.





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

## MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Manhattan Building, 315 Dearborn Street,  
CHICAGO, ILL.

HARLEY B. MITCHELL.....Editor  
A. J. MITCHELL.....Business Manager

Subscription Price, - - - \$1.00 per Year  
English and Foreign Subscription, - 1.60 " "

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., SEPTEMBER 15, 1906.

Official Paper of the Illinois Grain Dealers' Association.

### THE CROP REPORT.

Mr. Grimes, in his paper printed on another page, voices the sentiments of the grain trade generally. The crop report has fallen into disrepute. The public has little or no confidence in it. Its authoritative character must be restored, because the report is a guide not only to grain men and farmers, but to a large body of manufacturers and merchants, wholesale and retail, who to a degree base their operations upon the crop report's indications of the buying power of the country as affected by the crop yield. And there is now the further reason, that the American factor in the computations of the world's crop statistics by the International Institute of Agriculture should bear the stamp of unquestionable accuracy.

Broadly speaking, Mr. Grimes advocates an enlargement of the personnel of the service; but the Keep Commission's report on department methods, while confirming Mr. Grimes's estimate of the value of the report, shows that it is not so much the number of men employed in collecting data for the report as their kind. Over 85,000 people have taken part in the collection of cotton yield statistics alone! A large proportion of these, the Commission believe, could be dispensed with if the number of intelligent paid field agents and state correspondents were increased, who might be supplemented by "one, or possibly two, other classes of correspondents, whose figures might be used for checking or verifying the more useful and accurate sources of information."

However, Mr. Grimes is not wedded, we imagine, to his own notions per se of how the

truth shall be arrived at so long as it is the truth. He has suggested a method for the report's improvement, and, better still, he tells us he knows Congress is willing to furnish the money to make the report reliable whenever the Agricultural Department shows a disposition and a capacity to make the expenditure worth while. So it is up to the Department to "make good."

### INTERNATIONAL INSTITUTE OF AGRICULTURE.

Although conceived by an American, the International Institute of Agriculture has been talked of and is less known in the United States than in Europe. As, however, the Institute is an assured movement, in which twenty-six nations of the world have joined, a more general knowledge of its aims and purposes cannot be without interest, however briefly stated.

Something over a year ago David Lubin of California persuaded the King of Italy to take the initiative in the formation of the Institute, which is an international co-operative movement to

organize an institution which would have before it the conditions of agriculture in all countries; and which would publish periodical announcements of the quantity and quality of the crops in hand, and would thereby facilitate production of needed crops and help to steady prices. "This institution, acting in unison with the various national associations already constituted for similar purposes, would also furnish reliable information as to the demand and supply of agricultural labor" in different quarters of the globe; "would promote those agreements necessary for collective offense against diseases of plants and domestic animals;" and, finally, "would exercise a timely influence on the development of societies for rural coöperation, for agricultural insurance and for agrarian credit." In fine, the International Institute is intended to do for the world in general what our own Department of Agriculture is doing for the United States. The value of this work is no longer a subject of debate.

Congress at its last session appropriated \$5,000 to be represented in the Institute, which is expected to be in readiness to begin its work by the spring of 1907.

One branch of the work of the Institute of immediate interest to the grain trade will be its collection and compilation of international crop statistics. Says David Lubin:

Assuming now that the information of the United States is as perfect as can be as to the growing crops, of what value can that be as a factor in equity in the world's price-fixing of the current crop so long as authoritative Government summary based on facts of the world's growing crop cannot be had? It is well known that there are several importing countries of agricultural staples whose information of growing crops cannot be had for the reason that they are not kept. The Institute would solve this by a summary of experts, under the high auspices of the representatives of the various nations who are to compose the Institute.

Still another service the Institute may do—assist in the creation of that solidarity of the nations which makes for universal and unending peace; in the improvement of the agricultural class everywhere; and in the promotion of the prosperity of all nations. As the note issued by the Italian government phrases

it, "by tightening the bonds of interdependence which unite the different nations," a "new economic basis will be given to the ideal aspirations toward peace."

### ELEVATORS VS. CAR SERVICE.

Mr. Ketchum of the Iowa Railroad Commission has concluded, after some examination, that Iowa has inadequate elevator service; and thinks that the owners of all elevators of less than 25,000 bushels' capacity should be required to increase their capacity to this minimum size. This action, he thinks, would be a remedy for the car shortage evil in Iowa.

A simpler remedy would be for the Commission to direct that all grain grown in Iowa be consumed in Iowa, then no cars at all would be needed; or the Commission might direct that after all the houses in Iowa had been raised to 25,000 bushels' capacity and filled, then the farmers should cease selling and hauling grain to the railways; or they might order that the demand at the terminal markets for Iowa corn should cease until Iowa carriers felt themselves in a mood to haul Iowa grain out of Iowa instead of Western grain through Iowa.

Of course, a reasonable amount of storage should be expected of regular dealers, but when the average station has 30,000 to 40,000 bushels' room (30 to 40 car loads) in three or four houses, it is not a remedy simply to increase that capacity to 150,000 bushels. That is another case of "sweeping it under the bed," as the housewife would say. The railroads, for purposes of their own, are requiring a minimum of 25,000 bushels for houses erected on right-of-way leases; but as a matter of fact, at the average station such a house is an extravagance, the earnings of that size of elevators, under any conditions of a real car shortage, which the larger elevator is expected to remedy, being no more than those of a 10,000-bushel house, while the fixed charges are greater.

There is only one way to move grain; and that is to move it. Big houses, when the carriers are doing their duty, are needed only at assembling points or at the waterway towns where the farm deliveries during the closed season must be taken care of.

### NO CAUSE FOR ALARM.

There is a growing suspicion that James J. Hill likes to pose, but to a man who "does things" on his plane the role of a Cassandra is inappropriate. It is a fact, as Mr. Hill told the Northwestern farmers at the Minnesota State Fair the other day, that the resources of this nation have been exploited with a recklessness of waste that later on will be characterized as disgraceful—a limit of greed never surpassed or surpassable on earth. Public lands have been squandered on Mr. Hill's land grant roads to develop the Northwest before its natural development warranted railroad building; forests have been destroyed for all time; iron mines plundered, and so on, to make multi-millionaires; and now Mr. Hill tells us that we have also robbed the soil of its fertility. Well, Mr. Hill and his associates have set the pace in the quick ac-



quirement of easy and great riches; does he expect the rest of the world to stand by and play the part of the prudent?

But is it true that the soil has been robbed of its fertility and that the 200,000,000 people the nation will have to feed will go on short rations in 1950? Not a bit of it. American farming is rapidly becoming an exact science—more so than at any time in the world's history. The great farm experts of to-day are now at work restoring what Mr. Hill's generation destroyed, and doing it without resorting to Mr. Hill's plan of a "government farm in every congressional district." In the years to come this land will produce more of all growing things than it ever did—will certainly beat the results of present-day empirical agriculture in France, England, Germany or of any of the old and congested nations of the earth.

However, now that the government has given away all its arable lands in large blocks to Mr. Hill's and other favored railroads, it is very pleasing to note that Mr. Hill "would husband the remnant of our national domain by distributing it among actual settlers on the basis of forty acres apiece" and "call a halt on the wild career of waste and exhaustion, which marks the country and the times, and put our house in order for an enduring and prosperous future."

### UNIFORM GRADING.

The Grain Dealers' National Association has sent to twenty-four grain exchanges in this country invitations to be represented at a delegate conference to consider the matter of uniform standards of inspection, in phraseology and in fact. No date has been named for such conference, for the very good reason that the delegates must first be named.

A similar effort on the part of the Chief Grain Inspectors' National Association was a failure, but the time seems now ripe for a serious discussion of uniform inspection by the exchanges, as the grain trade is pretty generally agreed that uniformity must come, if not by exchange initiative, then by the Government's. The inspectors demonstrated by making them that uniform rules applicable to all markets are not only possible but practicable; and the old objection of "local conditions" no longer has force. Uniformity does not mean ignoring local conditions, which, when local in fact, may be provided for as now; but when the man in the East or in Europe or Mexico buys No. 2 corn, say, he ought to get the same kind of grain whether he buys it in Kansas City, St. Louis, Chicago, Toledo, Buffalo, or in any other corn market. Of course, if, as the seaboard inspectors say of the foreigner, he will not pay the price for the No. 2 grain that is up to grade, then there is not the slightest objection to his being sold just what he is willing to pay for; but he should not be sold sophisticated stuff as No. 2, nor should the grade be debased to suit his purse. The contract grade of any grain on the list should be a definite article, no matter where purchased, and contain a stated maximum percentage of moisture, broken kernels, dirt, and admixture of other grains, and no more. When

this is the universal rule, all the world will know what it will get for a warehouse receipt, and all the markets, moreover, will stand on the same footing. Uniformity is the "square deal" in the grain trade, so far as inspection is concerned; and nothing can prevent the Government from ultimately forcing the grain trade to its recognition and practice. If by their own action the exchanges forestall the Government, they may keep the inspection in their own hands so far as they still have that control.

### THE CAR SHORTAGE.

It is not merely the immensity of the grain crops to be handled this fall and winter, nor yet the vast tonnage of package freight to be moved, that will create the car famine that all authorities are agreed will be experienced during the grain shipping season. In spite of the large increase of rolling stock during the year, it is now apparent that owing to the carriers' tendency to increase the length of the trains behind the mogul engines, to economize labor and fuel, cars have been damaged or destroyed by the wear and tear of such service faster than replaced by new ones, and still more so by modern methods of quick switching, the friction of which the older cars are unable to withstand, and hence are unfit for damageable cargoes; even the new cars are barely able to stand up against such treatment, unless constructed in the most careful manner.

It will, therefore, be incumbent upon grain shippers to adjust their trades to the car service they are likely to have; and, when cars are furnished, to examine them carefully for all sources of leaks—defects that even comparatively new and good-looking cars may have "concealed about their persons" and invisible except to the discerning eye.

### INSPECTION LABORATORIES.

The two inspection laboratories to be established by the Agricultural Department at Baltimore and New Orleans are apparently tentative only at present. Dr. B. T. Galloway, chief of the Bureau of Plant Industry, recommending to Secretary Wilson that they be equipped for determining the simple factors of quality and condition in samples of grain, such as the amount of moisture, the amount of foreign material and damaged grain; and that the result of this examination shall be stated on a percentage basis in printed blanks which shall constitute the certificate mentioned in the bill.

No attempt will be made at present to define existing commercial grades or to correlate the percentage factors with existing commercial grades; but that the Department aims ultimately to go further than that is apparent from Dr. Galloway's second recommendation, to-wit:

that an expert be selected from among the practical grain men familiar with the whole grain trade and the present methods of inspection, who shall act as advisory agent during the organization of the work, with a view to his finally taking charge of it.

If only laboratories of the sort planned were in the Department's view, there would have been no need for the above recommendation nor the appointment of such a high-class man

as John D. Shanahan of Buffalo as such expert. Just what is coming, however, is at present unknown; but Mr. Shanahan's well-known advocacy of Government standards of grain, as well as his high rank as an inspector and his abilities as an organizer and executive officer, where doubtless the secret of his selection to do a work which, whatever it is, will, under his direction, commend itself to all honest shippers of export grain and also to buyers abroad, who, we firmly believe, will at no far distant day demand Government certificates of the grade and condition of grain sold them on "certificate final" terms unless the exchanges unite to unify the grades and insist on less sophistication of export grain.

### MAKE IT DEFINITE.

Now that the crop reports are bearish in the extreme, all the farming community (except those engaged in booming and selling farm lands) are cussing the Department for overestimating the crop, a policy which North Dakota and Nebraska objectors say has "cost the farmers of the United States millions of dollars." In Canada, while the land agents are talking 80 to 90 million bushels of wheat, the farmers with the stuff to sell talk about those "perspicuous liars," for there are only 65 millions in the crop. Snow, writing to the Country Gentleman some months ago, apologized for the crop report by saying that, "The greatest mistake of the critics lies in their failure to distinguish between a crop report and statistics." The distinction is too fine for the hoi polloi to master. If that is the real trouble,—the reason why the crop report is looked upon with manifest suspicion and dread,—why doesn't the Department abandon the percentage system entirely (no other country uses it), and give the public something the generality of mankind can understand without a diagram furnished by Howard Bartels, King or the statistician of the New York Produce or other public grain exchange?

### A WORD MORE.

In the report by C. C. Miles, printed in another column, it appears that over 30 per cent of the grain cars unloaded at Peoria in June and July of this year were received in bad condition and nearly 23 per cent of them were leaking on account of bad order.

No estimate can be made of the loss incurred; but whatever it was, it may in large part be characterized as the grain man's sacrifice to Carelessness.

Such losses may not all be avoided by the shipper; but the selection of cars and their preparation for loading, either by coopering or lining with paper or some cheap cotton or fiber fabric, would save the shipper enough to pay him handsomely. In no business is success more dependent upon the art of taking pains than in the grain business; and the waste in the business for want of taking pains is characteristic of one American habit, too common, of doing things, even when they must be done badly and wastefully.



## Editorial Mention.

Usually elevator men look after their roofs; but a North Dakota man did not; and a rain storm ruined 500 bushels of flax seed for him.

Another evidence of the growing popularity of the National Association trade rules is their adoption by the Cleveland Chamber of Commerce.

The Philadelphia Commercial Exchange has amended its rules to provide for arbitration of trade differences between members and non-members.

The Commerce Commission will take up its examination of witnesses on the "elevator allowances" question at Chicago on Monday, September 17.

The attorney-general of North Dakota has ruled that all foreign corporations doing business in that state must incorporate there or quit doing business. This includes grain companies.

The fourteenth annual Directory of the Grain Dealers of Illinois, issued by the Illinois Association, will be ready for distribution within a few days, and Secretary Strong believes it will be superior to any edition heretofore issued.

A request has been made for the Minnesota Railroad Commission to resume officially the weighing of hay, but the case was not greatly strengthened, perhaps, when it was testified before the Commission that a track scale is entirely unreliable as a weighing machine, erring frequently as much as a ton per car; and this is probably not far from the truth.

Just how much of a craze grain buying is getting to be with some men is beyond guessing; but when eighty applications are filed for elevator sites in three new towns located along the extension of the Chicago & Northwestern now building through Gregory County, S. D., one is sure that there are bound to be some disappointed hustlers.

The M., K. & T. R. R., it is estimated, has paid out a thousand dollars a month during the past twelve months to make good losses on grain shipments, chiefly by leakage. Well, \$12,000 won't buy many good grain cars at present prices, but it might put a good many cripples into condition for package freight and release an equal number of sound cars for grain.

The Kitchels Elevator Co. complain to the Railroad Commission of Indiana that cars on the Monon Route are "sold" by the train men to the best bidder, or at \$2 each; that it had knowledge of three cars sent on one day to its elevators that never reached them. This complaint, Secretary Riley of the Commission says, is a common one in Indiana, and the Commission is trying to break up the practice. If the Commission will go gunning

for the tip giver as well as for the tip taker and treat both alike in administering the punishment, the practice may be quickly broken up; but until the men who suborn the brakemen are publicly put in the same class with them, the practice will not be destroyed so long as bribery is profitable.

Vice-President Fairbanks has expressed the opinion that Illinois farmers will in the not distant future resort to irrigation to save the corn crop from drought. Will the Government, in that case, think it as much its duty to save the said farmers as it does to make new farms by irrigating the deserts, or must the Illinois farmer quit corn and go to "dry farming"?

The Pennsylvania Railroad Company has sold the bulk of its holdings of B. & O. and N. & W. stocks—one of the first fruits of the new railroad law. The sale is expected to advance the commercial interests of Philadelphia and to give the "Pennsy" some \$40,000,000 of cash to finance contemplated improvements—perhaps including even that elevator on Delaware River waterfront.

Everybody's Magazine names not less than a hundred bucket-shop operators on a big scale, whose plunder of the people is estimated to reach 200 millions of dollars annually. Cannot something be done to stop this enormous drain? "Moral suasion" seems not to go far. The only remedy apparently is an act of Congress putting the system in the same class as lotteries and making it a felony.

It appears that the assistant attorney-general of Kansas is a candidate for the higher office; and as evidence of his mettle he has proceeded to attack the Kansas Millers' Club as a trust! Well, as old Vanderbilt once said of one of his various sons-in-law, some men can be more kinds of a damphool than others, but even the late Mr. Sheppard would have to take a back seat when the chief law officer of Kansas or of Nebraska steps up to claim the prize button.

It is said certain farmers' companies have been badly stuck on oats, chiefly because of their unfamiliarity with the technical details of merchandising grain. But it has been one of the fundamental arguments of co-operatives in grain buying that no such knowledge is needed; therefore it is a waste of money to pay a first-class manager a first-class salary or to sell at a fair price to a regular grain buyer who knows how to handle grain with profit to himself and to the farmer as well.

George S. Loftus of St. Paul is said by the newspapers to be seeking a place on the Commerce Commission. As that body has just been reorganized by the President, why doesn't Governor Johnson of Minnesota, who indorses him, put him on the Minnesota Commission until such time as the Commerce Commission has a vacancy, thus putting him into training, so to say, ad interim. As commissioner of the Minnesota Shippers' Association Mr. Loftus has shown a capacity for this

kind of work that would justify such use of his abilities.

The president of the American Seed Trade Association in a circular to the public says:

The packet seed trade of this country amounts to 120,000,000 packets per annum, of which the general government gives away 40,000,000 packets. What industry could survive if the Government gave away free half as much as those engaged in the industry sold?

The Seed Trade Association is very right in this protest. No other trade is so outrageously abused by the Government; and every fair-minded Congressman ought to admit it, and act on the admission by abolishing the graft in toto.

The Chicago Board of Trade is a sufficient judge of its own rules and their effect on the Board's business; but now that the rules forbid advances without interest and discriminations in commission rates, the on-looker does not see the entire wisdom of doubling commission rates. Usually business is stimulated by reducing the cost of doing business, not by increasing it. However, taking into consideration the increased cost of doing all kinds of business in recent years, the increase in salaries and of living expenses, the friends of the larger commission rates have a strong argument.

Elevator agents in Minnesota have been instructed to test in the screen all wheat offered for sale. If this instruction is rigidly lived up to, it may be possible to bring Northwestern farmers to a realization of the enormous waste they have been guilty of in hauling uncleaned grain to the terminal markets. Careful screening and the destruction of foul weed seeds by burning would benefit the farms, while the retention of the oats, flax and other seeds, to be fed on the farm, would pay for the screening, to say nothing of the better price obtained for cleaned grain. However, the farmer, like most other men, is avaricious, and, whether from Missouri or Minnesota, he must be "shown" how to make a dollar by using a "fanning mill" before he will do it.

The North Dakota Bankers' Association has appointed a committee to investigate the grain business at Duluth and Superior. These bankers have absorbed from Superior men the idea that Superior is the victim of evil circumstances. In one sense she is; but Superior is not a cash grain market and, what is more, never can be, in the eyes of respectable traders, until the so-called Board of Trade there purges itself of the bucket-shoppers who control its alleged business. Senator Hudnall of Wisconsin, author of the Wisconsin grain inspection law, by which a grain market was sought to be established at Superior in competition with Duluth and Minneapolis, was doubtless honest in his intentions, but either he can't see, or won't see, that he is being made the tool of a lot of bucket-shop gamblers whose business he must first utterly destroy before he can hope to give respectability to the grain business of Superior or attract legitimate trade to that



place as a market. The North Dakota bankers will do well to handle Superior business with caution.

The Rock Island road in Iowa has yielded to the demand of the Iowa Grain Dealers' Association that in the settlement of claims "natural shrinkage" be estimated at one-fourth of one per cent instead of one-half. A quarter per cent is ample, since as a matter of fact the carrier is allowed by law no shrinkage whatever. It is an evidence, however, of the growing harmonious relations of carriers and the associations that the Rock Island concedes the demand; and it is to be hoped the same spirit of negotiation and "give-and-take" will bring about the same result wherever the one-half per cent shrinkage is still exacted by the carriers.

The statistician of the Commercial National Bank of Chicago has a new theory of averages in crop reporting, which he submits to the experts. He says:

Over-estimates offset under-estimates, and more favorable conditions prevailing subsequent to the date of the report in one locality (thus producing relatively better yields) are counterbalanced by less favorable conditions in another locality. Thus individual errors of judgment are corrected. It is surprising to know how accurately this theory works out. Taking the percentages of increase in wheat and decrease in cotton crop indicated in last year's report, and applying them, by way of illustration, to the actual production as shown in the "Year Book of the Department of Agriculture" for 1905, we find that the estimates were correct within 2,485,000 bushels of wheat and within 100,000 bales of cotton.

Hay making is hard labor, but after all the hay crop is one of the easiest to grow and handle. Few farmers really know how to grow it to make the land yield the most grass; yet when the necessity comes it is entirely within the probabilities that the land will grow twice or thrice as many tons per acre as it does now. Clark, the famous New England grass grower, does that now, and at present prices makes his hay farm pay more money per acre than any grain farm in the nation, and he does this even by selling the bulk of his hay instead of feeding it on the farm. Nowhere is the art of land cultivation at a lower ebb than in producing grass and yet 60 million tons of hay is only a fair crop.

The legal adviser of the Kansas Railroad Commission advises that body that the state demurrage law is valid and that actions brought under it can be sustained. The law provides that cars shall be supplied within not to exceed six days from date of the application, but orders for ten cars or less shall be filled within three days and for thirty cars or more within ten days. The penalty for failure to fill applications is \$1 per day per car and all actual damages sustained. Applicants for their part must deposit 25 per cent of the freight charges with the agent when making applications and must load cars within 48 hours after their arrival or pay \$1 per day demurrage; and if the cars are not used at all the shipper forfeits all actual damages sustained by the railroads; but in case of an order

for cars unaccompanied by a deposit neither side shall be liable for the penalties named. The law ought to be satisfactory to shippers; at any rate, it will require them to be as prompt as the roads in handling the cars set out for their use.

The appearance of the practical grain drier of small and medium capacity, costing only a moderate sum to install, puts it within the reach of every grain dealer doing a reasonably large business to have absolute command over the condition of the grain he handles. So much money is made conditioning grain at the terminals and transfer points that it is a wonder the country dealers have not demanded the small drier before this. However, now that it has arrived, the dealer has his option to take that "rake-off" himself or turn it over to the terminal elevator or the exporter—somebody's got to have it.

It is a pretty hard matter to overcome a scooper's habit of overbidding the market; but would it not be possible for sufferers to obtain the moral support of the local press to educate farmers up to their duty of supporting a grain buyer who has an elevator and who keeps an open market at all seasons of the year? Dealers should cultivate the local papers and present the farmers' side of the case to them, and the probability is that the local papers' presentation of the case would have some effect by stimulating local pride and the cupidity of local business men whose interests are in like measure affected by the conditions of the grain market, since the permanent merchants are dependent on the permanent grain market, and they ought to influence their farmer friends to support one rather than throw their grain to a man who is here to-day to gather the cream and gone to-morrow.

One of Senator McCumber's newspaper satellites at Washington is telling the Northwest that the senator (who is called the father of the inspection laboratories law, with which he had absolutely nothing to do, except perhaps to vote for it) will at the next session of Congress press legislation to have the whole business of grain inspection "put under a bureau of the Department of Agriculture." The senator is not dangerous. His own ideas of inspection are so crude he does not himself know what he wants to do; much less does he understand what the legislation he thinks he wants would be likely to accomplish. With John D. Shannahan in the Bureau of Plant Industry, as chief adviser of the Department on matters of grain inspection, it is a sure thing that the Department will enter into or countenance legislation upon no McCumberish schemes of national inspection. What the grain trade should do, however, now that it has notice of the senator's plans, and is assured of support by the Department of Agriculture, is to get together through the exchanges, agree upon and put into practice a uniform system of inspection and take measures to co-operate with Mr. Shannahan, who, as the trade well knows, may be depended upon to support before the Department or the Congress only such projects of

inspection and control thereof as shall be practically adapted to and called for by the actual needs of the grain trade and for the protection of its interests as well as those of the producers and our foreign trade.

If farmers would market their grain with more deliberation, it is not unlikely prices would be steadier; and certainly there would be less danger of the regular slump at the beginning of the season. Take wheat. In years not far distant, the movement rarely began before September, but now it begins about August 1, or even earlier from the Southwest; and uncured wheat is rushed to market as fast as the thrasher can put it into wagons. The result is a bearing of prices, not to mention the dockage for moisture, said this season to have reached 30 cents a bushel at the Gulf ports, or at transfers in that direction.

President Hill's complaint at the Minnesota Fair that the average yield of wheat is declining in this country, is hardly borne out by the results of the winter wheat harvest, which, as given by the Government report, is 16.7 bushels, compared with 14.3 bushels in 1905 and 15.3 bushels in 1898, the year of the next previous high yield. Indeed, it might be surprising to Mr. Hill to note the high yields in the old, "worn out" states as well as in the new ones—Nebraska, 23.2 bushels; Ohio, 25 bushels or more; Indiana, 20.7 bushels, and so on. The truth is, Mr. Hill's lament that, "Our wheat fields which in the days of virgin fertility yielded 25 to 40 bushels per acre, have dropped through exhaustion of native fertility to a 12-bushel average," is not true in either respect. Where rotation is practiced American wheat is probably doing rather better to-day, under good growing conditions, than it ever did.

The Knight Grain Co. of Monticello, Ill., has begun an action against the Monticello Grain Co. (farmers'), the immediate object of which is to test the legality of the "penalty clause" of the by-laws of the co-operative company. This clause provides that stockholders of the co-operative company who do not sell their grain to their own elevator shall pay to the companies as penalty therefor one-half a cent a bushel. This the Knight Grain Co. insists is an unlawful "restraint of trade." In support of this contention the bill of particulars sets out that the Monticello Grain Co. was organized in 1903 with 118 shareholders, farmers and tenants of lands which contributed 80 per cent of the grain delivered to the market at Monticello. The bill then continues to allege:

That the effect of the half-cent penalty is to prevent stockholders from selling their grain to any other dealer; that in 1902 there were three elevators in Monticello and that the Knight Grain Co. handled 430,923 bushels; in 1903, 564,733 bushels; in 1904, 250,900 bushels; in 1905, 80,239; after the opening of the farmers' elevator the former company received practically no grain from stockholders except during shortage of cars; that one elevator in the town is now closed and that the falling off of the Knight Grain Co.'s business is due to these by-laws which destroyed competition; that outside dealers are compelled to pay at least one cent more



per bushel than the Monticello Grain Co. to induce stockholders to sell their grain to them; that the Knight Grain Co. leased one of its elevators, with option of purchase, for a year, but so little business was done the elevator was not sold; that efforts to sell either elevator have been futile, owing to the penalty clause in the by-laws of the other company; that E. G. Knight and H. N. Knight have each purchased shares of stock in the Monticello Grain Co. and have demanded that they be transferred to them on the books, but the officers have refused to do so; that these by-laws tend to destroy competition and prevent stockholders from obtaining a higher price for their grain than offered by the Monticello Grain Co.; that all dealers should be permitted to conduct their business without being subjected to unjust competition; that no corporation can justly attempt to enforce such by-laws, because they are contrary to public policy and in restraint of trade, tend to destroy competition and create a monopoly in the grain business, etc.

It is a matter of surprise that a suit of this nature had not been stated before; but now it is begun it will of course go to the Supreme Court. Without assuming judicial functions one must say that many so-called restraints of trade clearly defined as such under the law and sustained by the courts are far less effective as supports to trade monopolies than this "penalty clause"; and it will be a great surprise indeed if the courts do not pronounce it illegal and vexatious. It reminds one of the way the Standard Oil once forced a railroad receiver in Ohio to pay it a rebate on all oil handled by the road for its competitor!

Shippers do not forget that the new rate law puts a check on their unfair practices quite as serious as those put upon the railroads. Rebates paid to shippers and deceptions of all sorts by them are punishable by heavy fines upon the beneficiaries as well as the carriers; and the men who have been holding up the roads, demanding the "privileges of big shippers," will find themselves badly handicapped in working their grafts as of old. No more underbilling, no more false classifications and the like. The carriers are put on the defensive in the matter of appeals from the Commerce Commission, but otherwise they are in no worse position than are shifty shippers who have been themselves responsible for the outrageous discriminations of the past—they have been the original Satans tempting the roads to the innumerable meannesses they have been guilty of. All this is to be stopped. Business will have to be done on the square hereafter and shippers will have to play their parts to that tune.

A Washington correspondent says the special agent sent by the Commerce Commission to investigate the relations of the grain elevators and grain buyers with the railroads has learned enough to prove the existence of conspiracy in many cases to prevent competition, and is able to present evidence that leading railroad officials have great and often controlling holdings in the favored elevator companies. One is disposed to take such stories with a grain of allowance; but, of course, in the light of the testimony taken by the Commission relative to the relations of Pennsylvania Railroad officials to the coal companies, such a condition is not impossible, however improbable.

## TRADE NOTES

The Tokio Trading Co., Tokio, Japan, are representatives in that country of The Wolf Co., Chambersburg, Pa.

It is reported that Fairbanks, Morse & Co. contemplate the erection of a \$400,000 building at Sixteenth Street and Wabash Avenue, Chicago.

The Greer Combination Grain Door Corporation has been incorporated at Norfolk, Va., with a capital stock of \$50,000. W. N. Sumwalt is president and W. C. Lightfoot secretary-treasurer.

The Charter Gas Engine Co., Sterling, Ill., has a four-page circular showing the various types of Charter Engines and some of the purposes to which they are adapted. This circular will be sent free to anyone who is interested in gas or gasoline engines.

The N. P. Bowsher Co. of South Bend, Ind., are looking forward to a very busy season, judging from the way orders are coming in at present. The company have materially enlarged their facilities this year and are able to care promptly for all business.

The American Manufacturing Co., 65 Wall Street, New York, has issued a four-page folder giving "a dozen reasons why there is more 'American' Transmission Rope used than all other brands combined." The folder also shows several halftone illustrations of drives where "American" rope is used.

Sprout, Waldron & Co., Muncy, Pa., have recently issued two booklets that will interest elevator men who grind feed. The first booklet, known as Catalog No. 21, describes Monarch Burr Mills and illustrates a number of different styles, as well as showing the various parts that go to make up the machine. "One of the Short Cuts of the Milling Business" is the title of the second booklet, which is an illustrated description of the Monarch Attrition Mill. If there is an elevator man in this country who is not familiar with the Monarch Mill he should, by all means, write for this booklet. It tells how the Monarch is constructed, how operated and the work it will do. Details of construction are illustrated and explained, giving the reader an intelligent idea of the mill.

The Hess Warming & Ventilating Co. report a large number of inquiries for the New "Ideal" Hess Grain Drier, just put upon the market by them, and the prospect of many sales as soon as the season for drying grain shall arrive. Among recent sales of Hess Driers is a large equipment for the Illinois Central Elevator at Cairo, Ill., operated by Bartlett, Frazier, Carrington Co. This is the fourth Hess Drier purchased by the Illinois Central, and the second installation for Bartlett-Frazier. An Ideal Drier, the new design, has just been shipped to the Chickasha plant of the El Reno Mill & Elevator Co., El Reno, Okla. The drier for the new plant of the Nashville Terminal Company has just been shipped and will be installed during the next two weeks. The drier for the Sunset Elevator, Galveston, operated by the J. Rosenbaum Grain Co., has been completed, and will be put into use on the new crop.

The Joseph Dixon Crucible Co., Jersey City, N. J., will send free to any of our readers a copy of their latest publication, "Through Frisco's Furnace." The book contains seven half-tone illustrations which are unquestionably the best views that have been shown of modern steel frame constructed buildings at San Francisco that withstood the earthquakes and fire of April 18, 1906. "Through Frisco's Furnace" tells in an interesting manner of the originality of the American architect and engineer, and of the soundness of their steel constructed buildings under the crucial test of earthquakes, dynamiting and fire. The purpose of the publication is to show how well Dixon's Silica-Graphite

Paint preserves the maximum strength of steel work of high buildings, so that severe strains can be successfully resisted.

An event which attracted quite a little interest in Indianapolis recently was the picnic given to its employes by the Nordyke & Marmon Co. The hundreds of workmen from this large plant gathered early in the morning and were carried by special interurban cars to one of the outlying parks, where every form of entertainment was provided. There is, in the N. & M. Co. factory, a friendliness and spirit of co-operation among the employes that is seldom found in large manufacturing plants.

## CONDITION OF FREIGHT CARS.

An editorial paragraph in the Railway and Engineering Review appears to have reached the spot with one of our friends who is in charge of the car service of one of the leading railway systems, for he writes under "personal" marking as follows:

"I have noted with much interest your comment on engines taken into shops and given a lick and a promise and then turned out, as per your issue of August 11. I think you could write a whole chapter on the same subject with regard to freight cars, as never before in the history of railroading has there been such a large percentage of defective freight car equipment, or cars unfit for grain, flour and similar loading. As high as 77 cars out of 100 have been rejected on tender of empty cars for return loaded movement. A little investigation will convince one that we are up against it, with the coming largest crop in the history of the country to be moved, while a large percentage of the equipment is in a poor physical condition for such loading. I get around a great deal and know that this is true practically in all sections of the country."

This might at first seem somewhat exaggerated, but a little reflection will call to the mind of everyone concerned with the supply of cars for the service in question that the percentage of cars of any but the newest lots is considerably lower than would at first be thought. We do not think, however, that this is so much a matter of indifferent repair as of ill-considered design. The advent of the M. C. B. coupler, steel underframing and the friction of draft gear, to meet the results of the pressure brought to bear for more rapid switching, has brought about a condition where not only the older cars are utterly unable to stand up in company with the stronger rolling stock, but even the most modern designs have their bodies so warped in switching as too soon to become unfit for damageable cargoes. The shifted and wracked bodies of even comparatively new box cars of modern design and build can be noted in any railroad yard as so prevalent a condition as to give reason for believing car designers would do well to give increased attention to the matter of the longitudinal diagonal bracing. The importance of getting the draft gear and framing into a condition to withstand the switching speeds of the present day has until lately so obscured the attention as to have somewhat obscured the relation of the superstructure. Now, however, that the substructure has been about settled, the car department might do well to give the body more of the attention than has hitherto been devoted thereto. Otherwise the voice of the claims department may be heard to an undesirable extent.—Railway and Engineering Review.

An invitation has been extended to the National Hay Association to hold its annual convention of 1907 at the Jamestown Exposition, Norfolk, Va. The Exposition will give the use of the auditorium, or hall of congresses, at the Exposition free of charge, together with suitable rooms for committees and special purposes. The transportation companies say that satisfactory rates will prevail from all points during the Exposition period, and reasonable hotel rates have also been assured.



## RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of August, 1906:

**BALTIMORE**—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	2,015,117	754,266	1,228,060	692,399
Corn, bushels.....	381,438	446,372	483,985	337,635
Oats, bushels.....	429,377	781,054	680	50,645
Barley, bushels.....	875	1,075		
Rye, bushels.....	15,419	38,762	25,714	
Timothy Seed, lbs.....	4,816	774		675
Clover Seed, lbs.....	590			
Hay, tons.....	5,216	3,737	1,292	752
Flour, bbls.....	309,619	205,217	123,016	66,835
Mill feed, tons.....				

**BOSTON**—Reported by Daniel D. Morris, secretary of the Chamber of Commerce.

Flour, bbls.....	183,689	144,653	99,251	44,088
Wheat, bushels.....	898,518	27,162	1,002,218	7,964
Corn, bushels.....	23,288	1,068,244	437	836,167
Oats, bushels.....	321,742	545,464	83,841	20,000
Rye, bushels.....	1,885	3,355		
Barley, bushels.....	1,850	48,703		44,762
Flax Seed, bushels.....				
Mill Feed, tons.....	743	704	43	32
Cornmeal, bbls.....	4,328	1,907	1,173	534
Oatmeal, bbls.....	14,509	9,551	14,214	2,604
Oatmeal, sacks.....	6,095	1,485	5,394	320
Hay, tons.....	5,100	5,780	824	1,276

**BUFFALO**—Reported by F. Howard Mason, secretary of the Chamber of Commerce. Opening April 17 to 30.

Wheat, bushels.....	5,277,307	2,422,147		
Corn, bushels.....	2,988,998	6,828,905		
Oats, bushels.....	2,122,650	2,350,305		
Barley, bushels.....	609,785	380,083		
Rye, bushels.....	98,700	82,500		
Timothy Seed, lbs.....				
Clover Seed, lbs.....				
Other Grass Seed, lbs.....				
Flax Seed, bushels.....	1,297,579	503,000		
Broom Corn, lbs.....				
Hay, tons.....	1,411,000	1,045,864		
Flour, bbls.....	1,241,000	1,045,864		

Canal did not open until May 2.

**CHICAGO**—Reported by Geo. F. Stone, secretary of the Board of Trade.

Wheat, bushels.....	9,140,438	5,602,390	3,797,343	1,859,220
Corn, bushels.....	4,676,606	8,497,062	5,767,129	11,615,364
Oats, bushels.....	10,145,660	12,966,466	3,551,205	6,519,253
Barley, bushels.....	516,900	679,432	126,334	213,465
Rye, bushels.....	138,515	207,002	72,048	83,032
Timothy Seed, lbs.....	1,991,780	2,150,211	1,059,544	774,003
Clover Seed, lbs.....	232,112	9,866	44,956	89,941
Other Grass Seed, lbs.....	629,260	578,077	4,646,369	4,158,320
Flax Seed, bushels.....	106,100	341,455	138,000	74,432
Broom Corn, lbs.....	361,410	511,350	479,500	319,756
Hay, tons.....	17,206	16,714	691	1,052
Flour, bbls.....	754,649	716,040	728,868	746,499

**CINCINNATI**—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Wheat, bushels.....	385,370	497,611	387,022	457,532
Corn, bushels.....	800,116	507,284	581,278	206,760
Oats, bushels.....	892,862	1,342,854	691,318	896,598
Barley, bushels.....	50	9,000		70
Malt, bushels.....				
Rye, bushels.....	59,779	13,954	21,478	24,560
Timothy Seed, bags.....	4,583	2,864	2,246	1,684
Clover Seed, bags.....	1,421	327	659	324
Other Grass Seed, bags.....	13,539	10,277	5,651	6,267
Hay, tons.....	8,052	7,759	5,291	4,416
Flour, bbls.....	131,532	134,430	95,121	76,676

**CLEVELAND**—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Wheat, bushels.....	627,409	242,148	421,775	29,813
Corn, bushels.....	293,988	529,405	191,231	301,551
Oats, bushels.....	2,020,230	2,584,792	300,485	837,926
Barley, bushels.....	2,100	2,033		8,536
Flax Seed, bushels.....				
Hay, tons.....	5,043	3,334	929	789
Flour, tons.....	5,797	5,449	2,134	3,146

**DULUTH**—Reported by H. B. Moore, secretary of the Board of Trade.

Wheat, bushels.....	616,842	792,430	2,243,826	779,504
Corn, bushels.....	7,277	46,310	14,147	43,986
Oats, bushels.....	557,416	874,568	1,172,254	681,706
Barley, bushels.....	521,910	553,745	759,520	460,705
Rye, bushels.....	60,283	28,472	26,343	12,708
Flax Seed, bushels.....	865,857	40,515	2,138,081	604,375
Flour, bbls.....	584,570	362,000	607,165	741,370

**GALVESTON**—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....			1,800,400	
Corn, bushels.....				
Barley, bushels.....				

**KANSAS CITY**—Reported by E. D. Bigelow, secretary of the Board of Trade.

Wheat, bushels.....	5,822,000	7,630,000	5,805,000	5,655,000
Corn, bushels.....	1,522,000	2,601,000	1,109,000	2,236,000
Oats, bushels.....	724,500	793,500	312,000	453,000
Barley, bushels.....	15,000	83,000		34,000
Rye, bushels.....	23,000	24,000	4,000	15,000
Bran, tons.....	1,065	1,770	8,310	8,595
Flax Seed, bushels.....	32,000	4,000	1,600	3,200
Hay, tons.....	7,550	12,820	5,480	2,630
Flour, bbls.....				

**MILWAUKEE**—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Wheat, bushels.....	939,840	612,480	229,778	75,245
Corn, bushels.....	170,050	193,800	388,883	96,530
Oats, bushels.....	703,100	666,900	297,350	277,364
Barley, bushels.....	375,100	395,200	155,529	220,806
Rye, bushels.....	42,400	47,200	10,400	6,400
Timothy Seed, lbs.....	47,350	82,135	280,745	752,530
Clover Seed, lbs.....	299,495	49,700	91,810	30,260
Flax Seed, bushels.....	7,420			
Hay, tons.....	1,079	1,009	48	
Flour, bbls.....	265,025	207,125	302,263	325,982

**MINNEAPOLIS**—Reported by L. T. Jamme, secretary of the Chamber of Commerce.

Wheat, bushels.....	2,536,320	4,273,180	2,259,650	2,261,300
Corn, bushels.....	117,580	192,370	101,940	60,870
Oats, bushels.....	1,011,290	1,416,480	1,004,970	722,210
Barley, bushels.....	353,390	819,820	505,350	396,850
Rye, bushels.....	61,430	84,550	54,990	27,860
Flax Seed, bushels.....	179,540	150,950	258,730	157,930
Hay, tons.....	2,000	1,630	50	60
Flour, bbls.....	16,285	17,168	1,393,249	1,152,079

**MONTREAL**—Reported by George Hadrill, secretary of the Board of Trade.

Wheat, bushels.....	1,991,669	1,533,786	1,843,672	865,248
Corn, bushels.....	529,885	1,246,234	709,411	1,297,677
Oats, bushels.....	855,778	545,903	876,573	139,958
Barley, bushels.....	185,226	198,331	164,338	103,045
Rye, bushels.....	54,869			
Flax Seed, bushels.....	671,017		704,610	
Flour, barrels.....	163,105	77,348	161,397	151,26

**NEW ORLEANS**—Reported by H. S. Herring, secretary of the Board of Trade.

Wheat, bushels.....	1,475,000	3,000	730,447	
Corn, bushels.....	216,800	108,000	136,692	37,602
Oats, bushels.....	471,000	244,000	107,813	21,290
Barley, bushels.....				
Rough rice.....				
Clean rice pockets.....				
Hay, bales.....	38,353		263	
*Flour, bbls.....	41,400	41,687	59,457	19,282

\*Through consignments of flour for export not included in receipts.

**OMAHA**—Reported by Edward J. McVann, secretary of the Grain Exchange.

Wheat, bu.....	2,193,600	843,000	1,944,000	532,000
Corn, bu.....	1,844,700	2,201,000	1,650,000	2,090,400
Oats, bu.....	924,800	295,500	387,000	259,500
Barley, bu.....	9,000	6,000	2,000	
Rye, bu.....	2,000	11,000	2,000	4,000

**PEORIA**—Reported by R. C. Grier, secretary of the Board of Trade.

Wheat, bushels.....	199,500	175,200	224,900	156,000
Corn, bushels.....	973,400	1,130,000	483,200	500,000
Oats, bushels.....	1,879,800	1,590,000	1,290,400	861,200
Barley, bushels.....	52,000	55,600	17,000	21,600
Rye, bushels.....	21,600	26,400	10,800	13,600
Mill Feed, tons.....	1,535	825	3,259	3,915
Spirits and Liquors, bbls.....				
Syrups and Glucose, bbls.....				
Seeds, lbs.....	150,000	60,000		
Broom Corn, lbs.....				
Hay, tons.....	3,360	2,600	383	270
Flour, bbls.....	139,050	70,400	135,160	67,950

**PHILADELPHIA**—Reported by L. J. Logan, secretary of the Commercial Exchange.

Wheat, bushels.....	1,572,197	717,570	954,542	272,000
Corn, bushels.....	60,801	637,669		445,710
Oats, bushels.....	653,581	1,103,677		40,000
Barley, bushels.....	800	9,600		
Rye, bushels.....	800			
Timothy Seed, bags.....	587	385		
Clover Seed, bags.....	422	418		
Flax Seed, bushels.....	158,000	33,600		
Hay, tons.....	3,810	5,600		
Flour, bbls.....	381,702	193,447	145,086	59,638

**ST. LOUIS**—Reported by Geo. H. Morgan, secretary of the Merchants' Exchange.

Wheat, bushels.....	2,116,000	3,025,750	957,515	2,296,140
" sacks.....	98,131	132,046	1,040	2,848
Corn, bushels.....	3,556,300	1,525,000	2,574,270	1,506,955
" sacks.....	5,576	2,942	60,560	13,717
Oats, bushels.....	2,678,400	2,130,300	1,153,200	1,505,995
" sacks.....		1,093	33,145	25,565
Barley, bushels.....	2,600	7,500	6,765	1,300
" sacks.....		66		
Rye, bushels.....	28,000	32,000	22,665	10,010
" sacks.....	312	500		852
Hay, tons.....	19,398	24,179	11,360	6,961
Flour, bbls.....	182,955	240,080	224,880	310,400

**SAN FRANCISCO**—Reported by Wm. B. Downes, statistician of the Merchants' Exchange.

Wheat, centals.....	115,279		6,426	
Corn, centals.....	2,918		532	
Oats, centals.....	37,411		69	
Barley, centals.....	252,378		197,775	
Rye, centals.....	1,515			
Flax Seed, sacks.....	351			
Hay, tons.....	19,308		1,056	
Flour, bbls.....	98,072		42,965	

**TOLEDO**—Reported by A. Gassoway, secretary of the Produce Exchange.

Wheat, bushels.....	870,000	1,384,000	305,700	632,200
Corn, bushels.....	333,000	392,000	184,700	261,600
Oats, bushels.....	2,563,500	3,665,600	1,242,200	1,556,950
Barley, bushels.....		1,200		
Rye, bushels.....	40,500	105,400	18,820	43,215
Clover Seed, bags.....	350	966	1,000	700

## NO TAX ON GRAIN IN STORE.

In the case of the town of Washburn, Wis., against the Nye-Jenks Co., an action to collect taxes levied on grain in store, Judge Parish, at Superior on July 16, handed down a decision in which he rules that grain in store is grain in transit and not taxable locally.

The subject matter of the decision has been of great concern to Superior and other lake towns for a long time, and for years has been discussed and fought over by the board of review, the assessors and the people; but this is the first decision on the question. It is expected that it will be taken to the Supreme Court, and it is said Superior is not expected to abide by the decision.

Less than 300,000 bushels of wheat were in store at Duluth, Minn., on September 1, and less than 1,400,000 bushels of all kinds of grain.

## VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, September 8, 1906, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore.....	1,324,000	275,000	327,000	28,000	.....
Boston.....	324,000	19,000	10,000	.....	.....
Buffalo.....	479,000	254,000	165,000	402,000	30,000
do. afloat.....	.....	.....	.....	.....	.....
Chicago.....	8,708,000	86,000	1,309,000	578,000	.....
do. afloat.....	.....	.....	.....	.....	.....
Detroit.....	421,000	43,000	68,000	73,000	.....
do. afloat.....	.....	.....	.....	.....	.....
Duluth.....	600,000	2,000	230,000	146,000	320,000
do. afloat.....	.....	.....	.....	.....	.....
Ft. William.....	368,000	.....	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
Galveston.....	2,150,000	31,000	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
Indianapolis.....	523,000	136,000	28,000	.....	.....
Kansas City.....	2,547,000	214,000	196,000	.....	.....
Milwaukee.....	352,000	19,000	178,000	66,000	59,000
do. afloat.....	.....	.....	.....	.....	.....
Minneapolis.....	3,322,000	12,000	654,000	81,000	182,000
Montreal.....	308,000	27,000	118,000	1,000	1,000
New Orleans.....	943,000	151,000	221,000	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
New York.....	1,273,000	80,000	399,000	3,000	23,000
do. afloat.....	.....	.....	.....	.....	.....
Peoria.....	173,000	47,000	1,034,000	10,000	.....
Philadelphia.....	407,000	2,000	123,000	.....	.....
Port Arthur.....	292,000	.....	.....	.....	.....
do. afloat.....	.....	.....	.....	.....	.....
St. Louis.....	3,775,000	112,000	252,000	5,000	11,000
do. afloat.....	.....	.....	.....	.....	.....
Toledo.....	796,000	150,000	1,360,000	32,000	2,000
do. afloat.....	.....	.....	.....	.....	.....
Toronto.....	.....	.....	8,000	.....	.....
On Canal.....	705,000	19,000	76,000	.....	30,000
On Lakes.....	379,000	1,252,000	21,000	.....	207,000
On Miss. River.....	.....	.....	.....	.....	.....
Grand total.....	30,169,000	2,931,000	7,077,000	1,425,000	865,000
Corresponding date 1905.....	12,637,000	4,938,000	13,029,000	939,000	1,303,000
Weekly Inc.....	115,000	673,000	35,000	.....	34,000
Weekly Dec.....	.....	.....	.....	6,000	.....



# ELEVATOR AND GRAIN NEWS

## ILLINOIS.

Grain is being received at the new elevator in Harrisville, Ill.

G. W. Banks of Rockford, Ill., has recently had his elevator remodeled.

The Stonington Farmers' Elevator Co. will erect an elevator at Stonington, Ill.

Truby & Co. of Andus, Ill., have purchased P. J. Meyer's elevator at that place.

A new engine is being installed by the Stege Grain Co. of Chicago Heights, Ill.

The Neola Elevator Co. and the Simpson Lumber Co. of Arlington, Ill., have consolidated.

G. F. Smith of San Jose has leased ground at Myers' Station, Ill., and will erect an elevator.

The Northwestern Elevator & Grain Co., is making improvements on its property in Keithsburg, Ill.

The capital stock of the Mattoon Grain Co. of Mattoon, Ill., has been increased from \$9,000 to \$13,000.

Peter Peterson, formerly of Fisher, Ill., has commenced building a new grain elevator in East Urbana, Ill.

The Pontiac Farmers' Grain Co. of Pontiac, Ill., is overhauling its elevator and remodeling the interior workings.

James K. Horton has purchased the new elevator at Garrett, Ill., from the C. A. Burks Grain Co. The consideration was \$25,000.

Considerable improvement has been made at the Sharp & Trautvetter Elevator at Warsaw, Ill., a yard and stock chute having been installed.

G. F. Smith of San Jose, will erect a grain elevator at Sand Prairie, Ill. There is no other elevator between Green Valley and Pekin.

The Farmers' Elevator Co. of Weston, Ill., which was in difficulty because of the disappearance of the manager, has resumed and is in charge of R. J. Stewart.

Miller & Clark have had a force of men at work remodeling their grain elevator at Ancona, Ill. It is estimated that the cost of repairs will exceed \$2,000.

William Richardson of Ellsworth, Ill., is replacing his elevator recently destroyed, with a new building 36x36 feet in size and 50 feet high. It is fast nearing completion.

The completion of the new White & Co. elevator at Lena, Ill., has made it necessary to remove the old grain house, which has done service for years. It will still be used for grain storage.

C. E. Jurz bought in the Frankfort elevator on the E. J. & E. R. R. at Joliet, Ill., recently, and in order to get a settlement of the \$4,000 mortgage he held, deducted \$1,000 and accepted \$3,000. He then sold it to Englehard Barnes for \$6,000.

A farmers' elevator will be erected at a cost of \$8,000 by a corporation at Mattoon, Ill. The Illinois Central has refused permission to erect the building on its right-of-way and will not build a switch. It is hoped to be ready for the fall business.

John E. Sheary, as receiver of the New Holland Grain & Coal Co. of New Holland, Ill., has sold the lands, cribs and buildings, which cost over \$15,000, to James Ryan for \$6,000. It is understood the purchase was made in the interest of a combination comprising fifteen farmers. It has been leased to the Farmers' Grain & Coal Co., of Mason City.

Recently the Western Glucose Co., a corporation with \$2,400,000 worth of stock, was organized by Chicago capitalists under the laws of Maine. Of the \$2,400,000 of stock there will be one issue of \$1,200,000 7 per cent cumulative preferred, and \$1,200,000 of common stock. There will be no bond issue. The officers and directors are: President, Daniel B. Scully; vice-president, F. C. Letts; treasurer, C. B. Shedden; secretary and counsel, W. E. O'Neill; directors, Daniel B. Scully, F. C. Letts, C. B. Shedden, W. E. O'Neill, E. A. Shedden, H. L. Spencer and Philip L. Saenger. The company has secured twenty acres of land near Robey, Ind., and it is the expectation of the management to begin turning out glucose August 1, 1907. The plant will have a capacity of 10,000 bushels of corn per day at the start. The buildings are being so arranged that they can be enlarged without great expense, and it is the intention not to increase their size

until they have a capacity of 20,000 bushels of corn daily.

## IOWA.

H. L. Hughes has leased the Neola Elevator at Storm Lake, Iowa.

The S. & C. elevator at Alden, Iowa, is operating in charge of Henry Farr.

A new elevator is being erected at Mason City, Iowa, by the Nye-Schneider-Fowler Co.

D. C. Peck, a banker of Clinton, Minn., has purchased the elevator at Primghar, Iowa.

Farmers in the vicinity of Goldfield, Iowa, have organized a co-operative elevator company.

J. A. Sauer of Le Mars, Iowa, has ordered an improved Hall Signaling Grain Distributor.

Edmonds, Shade & Co. are building a new oat house near their elevator at Le Mars, Iowa.

E. L. Ballou of Larrabee, Iowa, equipped his elevator with a Hall Signaling Grain Distributor.

It is understood the Great Western Cereal Co. is planning to reopen its abandoned elevator at Sioux City, Iowa.

Bartlett, Kuhn & Co. are equipping their elevator at Maurice, Iowa, with an improved Hall Signaling Distributor.

The Farmers' Elevator Co., of Le Mars, Iowa, will install a Hall Signaling Grain Distributor in its elevator.

The Cavers-Von Dorn Grain Co., of Council Bluffs, Iowa, has installed a Hall Non-chokable Boot in its elevator.

Frohardt Bros. are reported to have succeeded C. H. Cooper in the grain business at Council Bluffs, Iowa.

The De Wolf & Wells Grain Co. opened its elevator at Spencer, Iowa, recently with Mr. Sutcliffe in charge.

C. H. Cooper of Council Bluffs has acquired the elevators of the Neola Elevator Co. at Underwood and at Neola, Iowa.

Nelson Bros. & Rich of Swaledale, Iowa, recently sold their elevator and lumber business to H. J. Klemme of Belmond.

E. L. Ballou of Larabee, Iowa, has sold his grain, coal and lumber business to Weart & Lysaght of Cherokee.

The Kunz Grain Co. of Wesley, Iowa, has recently acquired the elevators of A. Cary at New Hampton and Sumner.

T. J. Birdsall's elevator at Mt. Pleasant, Iowa, opened for business early in August, under the management of Henry Farr.

The Edwards elevator of Red Oak, Iowa, has been traded in toward a large Kansas farm which Mr. Edwards will conduct.

Edward Cashman of Crystal Lake, Iowa, has purchased the elevator at Hayfield, formerly owned by his brother, Thomas Cashman.

More than 100 farmers near Linn, Iowa, have organized a co-operative elevator company and will have the elevator ready for fall business.

W. A. Bryan & Sons of Cedar Falls, Iowa, recently sold their elevator at Popéjoy to Alfred Pierce and J. W. Zugall, who are operating it.

A new 25,000-bushel elevator will be built at Madrid, Iowa, by the Neola Elevator Co. It will be equipped with a sheller and a gasoline engine.

A new elevator has been started at Iowa Falls, Iowa, by the Farmers' Elevator Co. Its hoisting apparatus is run by a 5-horsepower electric motor.

The Updike Grain Co. of Gray, Iowa, has purchased the elevators of the Westbrook-Gibbons Grain Co. and are now open with A. Linn in charge.

Chicago and Sioux City grain men, it is stated, will unite in the building of a \$100,000 elevator at Sioux City, Iowa. Local banks have subscribed \$50,000.

There is a movement on foot for the organization of a farmers' co-operative elevator company in Belle Plaine, Iowa, to take over the old Fenton Elevator.

A farmers' elevator company has been organized at Lohrville, Iowa, with J. E. Barr, president; J. A. Hunter, vice-president, and A. H. Womeldorf, secretary.

The American Grain Co., of Bigelow, Iowa, has become McLaughlin, Ellis & Co. There will be no change in the management of the affairs of the old company.

At the annual meeting of the Huntting Elevator Co. of McGregor, Iowa, J. S. Ellsworth was elected president; D. S. Baird, secretary, and C. E. Huntting, treasurer.

Frank Thola is buying grain in the former Jordan elevator for Charles Rippe of Bancroft, Iowa, who has bought the property of the Plymouth Elevator Co. Mr. Rippe will put up a

corn crib with 15,000 bushels' capacity in time for the new crop.

Recently the Neola Elevator Co. acquired the Atlas elevators at Bagley, Iowa. The company is using the east elevator while the west one is being remodeled.

A Farmers' Elevator Co., capitalized at \$10,000, of which half is paid up, has been organized at Holland, Iowa. C. Poppenga is president and Chris. Franken, secretary.

The D. Rothschild Grain Co. of Davenport, Iowa, has purchased the Ketcham elevator at Marengo, and after remodeling the plant will operate it as a branch to their main elevator.

A Farmers' Elevator Co. has been organized at Gillett Grove, Iowa, with a capital stock of \$10,000. Among those interested are G. M. Dyer, C. C. Stewart, Samuel Ferguson and others.

W. V. Harrington & Co. of Pipestone, Minn., have purchased all the elevators of the Western Elevator Co. from Pipestone to Merrill, Iowa. The headquarters will be moved to Sioux City.

R. O. Sherrick of Fairfield, Iowa, has purchased of E. P. Bacon the elevator and appurtenances at Libertyville, Iowa, the price being \$1,200. He also bought the stock scales at that place, paying therefor \$600.

A recent incorporation is the Farmers' Elevator Co., of Rock Rapids, Iowa, which is capitalized at \$10,000, of which \$4,000 is paid up. R. A. Kitchen, N. Hampe, H. F. Borman and others are interested in the enterprise.

The Thor Lumber & Grain Co. property at Thor, Iowa, has been sold to the recently organized Farmers' Elevator Co., which is capitalized at \$10,000, of which half is paid up. Peter Larson is president and N. M. Nesheim secretary.

A co-operative society has been organized by 116 farmers at Manson, Iowa, with a paid-up capital of \$4,500. Tom Griffith is president; James Griffith, vice-president; Jake Gingerich, secretary, and B. E. Sebern, treasurer. An elevator will be erected.

A Minneapolis firm was awarded the contract to build the large elevator and engine house for the Farmers' Elevator Co. in Le Mars, Iowa, the price being approximately \$5,000. The main building is to be 30x32 feet in size and 46 feet high to the plate, with all modern equipments. It is expected the elevator will be in running order by October 1.

## MINNESOTA AND WISCONSIN.

A new elevator will be built at Canby, Minn.

The elevator at Havana, Minn., will be reopened.

The new elevator at Blaisdell, Wis., is completed.

A. C. Thomas has opened the elevator at Horton, Minn.

A farmers' elevator company has been organized at Ashby, Minn.

A farmers' elevator company is being organized at Courtland, Minn.

Work on the new elevator at Marietta, Minn., is nearing completion.

The Farmers' Elevator Co. of Fosston, Minn., will lease its elevator.

Gus Boehmke of Pipestone, Minn., is building an addition to his elevator.

The Rex Elevator Co. recently acquired the John Miller elevator at Hayfield, Minn.

The McIntyre-Ingold elevator at Sacred Heart, Minn., is being raised and repaired.

John Runquist will soon have his new grain elevator at Grasston, Minn., completed.

George Cota has leased his elevator at Oconto Falls, Wis., to the H. E. McEachron Co.

The Andrew & Gage elevator at Lake Park, Minn., will be removed to another position.

The M. & N. Elevator at Erskine, Minn., has been reopened with John B. Peterson in charge.

The Pierce-Stephanson Elevator at Spring Valley, Minn., is being remodeled and enlarged.

A. D. Beaudreau of De Graff, Minn., has sold his elevator to a Mr. Chase, of Willow Lake, S. D.

A new boot and new belt, cups, etc., are being installed in the Farmers' Elevator at Pipestone, Minn.

An elevator may be built this fall by the farmers at Iona, Minn. H. Weirauch is promoting the enterprise.

The Jenkins Elevator Co. has sold its plant at Elizabeth, Minn., to the Stewart Elevator Co. at Minneapolis.

The Goodhue Farmers' Warehouse Co., of Goodhue, Minn., has given Houstain Bros. of Minneapolis the contract for a 25,000-bushel modern elevator, to be fitted with dump scales, weighing-out scales, grain cleaner, eleven hopper bins, double



elevating appliance and other equipments. About \$5,000 will be expended.

The Farmers' Elevator at Ivanhoe, Minn., has opened for business with D. T. Jones as buyer.

The Peavey Elevator at Lake Wilson, Minn., has been sold to the Plymouth Elevator Co. of Sioux Falls, S. D.

A. D. Moore of Grand Meadow, Minn., has acquired the Farmers' Warehouse and will operate it this fall.

A large new steel pit is being put in and a rope drive installed in the Farmers' Elevator at La Fayette, Minn.

An elevator has been opened at Winnebago City, Minn., by the Plymouth Elevator Co. of Sioux Falls, S. D.

The Minnesota & Iowa Cereal Co. recently closed its elevator at Nicollet, Minn., but will reopen it in the fall.

The Farmers' Elevator Co. at Lake Benton, Minn., has purchased the Bingham Elevator and will run both places.

J. A. Smith has purchased the R. E. Jones & Co. elevator at Lake City, Minn., and placed H. W. Eastman in charge.

At Stratford, Minn., the Hawkeye, McIntyre, Great Western and Farmers' elevator companies are building elevators.

The Willmar Milling Co. has disposed of its elevators at Raymond, Clara City and Lynd, Minn., to the Thorpe Elevator Co.

The Plymouth Elevator at Grogan, Minn., has reopened after being idle six months. Knute S. Thompson is in charge.

The annex to the St. Anthony & Dakota Elevator at Fosston, Minn., has been taken down and shipped to Hope, N. D.

A new depot has made it necessary for the Northwestern Elevator at Benson, Minn., to be moved to another position.

The Great Western Elevator Co. is building an addition to its Sherburne, Minn., plant, to be used as a flour and feed room.

Theodore Lampe of Lake Benton has purchased the Van Dusen Elevator at Verdi, Minn., and will make extensive improvements.

George Long is building an elevator of nine bins near Zion, N. D. It will be equipped with hoisting apparatus, dump, etc.

It is planned to tear down the Western Elevator at Hammond, Minn., and replace it at once with a more modern structure.

The Farmers' Elevator Co. has acquired the Johnson elevator at Rushford, Minn., and has retained Mr. Johnson as manager.

G. P. Snyder of Erwin, Minn., has acquired half interest in the A. W. Stone elevator and the firm is now styled the Erwin Elevator Co.

After being closed for a year the Benson Grain Co.'s elevator at Worthington, Minn., is again in operation, with E. L. Schwartz in charge.

It is announced that the Tanner Elevator of Round Prairie, Minn., will be reopened and that flour and bran will be exchanged for wheat.

New elevators are being erected at Randolph, Minn., by the Verdon, Farmers', Security, Great Western and Hawkeye elevator companies.

The Hill Elevator, at Clinton, Minn., recently owned by C. E. Fletcher, has been purchased by the proprietor of the Montevideo Roller Mills.

At a cost of \$50,000 the Sheffield Elevator Co. of Minneapolis, is erecting ten concrete grain tanks, 80 feet high and 24.6 feet in diameter.

The Hyde Elevator at Spring Valley, Minn., is being remodeled and enlarged. James Pierce is now in charge, having succeeded C. W. Greene.

The Farmers' Elevator Co. of Waupun, Wis., incorporated for \$10,000, has commenced business, having purchased the Stanton elevator for \$5,000.

About \$400 will be spent on improving the elevator of the Norman County Elevator Co. of Evansville, Minn. Hans Olsen is the new president.

H. H. Neuenburg & Co.'s elevator at Danube, Minn., has been sold to the Crown Elevator Co. of Minneapolis. P. H. Fabel has been retained as buyer.

After remaining idle for three seasons Hubbard & Palmer's elevator at Brewster, Minn., has been reopened and T. A. Thorstensen is in charge.

John Dunn of Black River Falls, Wis., has just completed some improvements to his elevator building, which will add to the grain storage capacity about 10,000 bushels, giving him a capacity of about 20,000 bushels of grain, besides warehouse room for flour, feed and potatoes. The improvements consist of repairing basement bins,

putting in some elevator bins, and the installment of a new grain elevator leg.

Herman Poehler of Courtland, with a couple of New Ulm men, has purchased the Doty Elevator at Courtland, Minn., and will have control of it as manager.

Geiwitz & Co., of Minneota, Minn., are building a large grain warehouse which will be equipped with elevator, dump scales and other up-to-date machinery.

At Little Falls, Minn., the Farmers' Exchange has surrendered its elevator privileges to the Monarch Co. and W. L. Smith will have charge of the plant.

J. E. McBride has disposed of the Thompson Elevator at Hastings, Minn., to M. D. Green of Minneapolis, the deal being made in exchange for Canadian land.

John Pokarnorski of Silver Lake, Minn., is making extensive improvements in his elevator. He will build a new pit in the elevator and a new platform and driveway.

Nick Abrahamson will build an elevator, 24x24 feet square and two stories high, at New Auburn, Wis. Sheds for a feed mill will make the plant 45x45 feet over all.

It is a question as to whether the old elevator at New Richmond, Wis., will be operated this year, James Martin, the manager, having resigned because the place needed repairs.

It is understood the Little Falls Retail Merchants' Association of Little Falls, Minn., will engage in the grain business under the style of Little Falls Merchants' Co-operative Association.

After operating many years the Hyde Elevator at Shelburne, Minn., has been sold and closed. It is reported the building will be razed, leaving the field to the remaining four elevators.

The Hubbard & Palmer grain elevator at Worthington, Minn., has been opened after eighteen months of idleness. T. C. Ayer is in charge and has thoroughly overhauled the plant.

Articles of incorporation have been filed by the Henricks Grain Co. of Duluth, Minn., which is capitalized for \$25,000. The incorporators are J. F. McCarthy, N. O. Henricks and A. Henricks.

G. F. Hostenstain of Minneapolis has secured the contract for the \$20,000 elevator Bingham Bros. will erect at New Ulm. It will be about the same size as the one which burned.

The Winona Seed Co. has secured the elevator occupied by the Chicago Western Co., at Stewartville, Minn., and will run it in connection with their warehouse. August Kath is in charge.

The Benson Market Co. of Benson, Minn., will expend \$2,000 in improvements. New bin room will be provided, the office enlarged and an automatic weigher and feed mill will be put in.

B. C. Crangle, secretary of the Federal Elevator Co., says the company may decide to raze the present elevator at Lake Park, Minn., and erect a house having a capacity of 50,000 bushels.

The Atlas Elevator Company, of Hills, Minn., is putting a cement boot under its elevator. The large steel boot that was sent there was found to be impracticable and cement will take its place.

W. J. Jennison & Co., millers, at Appleton, Minn., will build six grain tanks of reinforced concrete. The combined capacity of all will be 100,000 bushels of wheat. The tanks will be 75 feet high with a gallery above.

The Kansas City Elevator of West Concord, Minn., that has stood idle for some time, has been sold to the Rex Elevator Co. of Minneapolis, and has been thoroughly overhauled and put in shape for business.

Elevator "A" of the C. M. & St. P. R. R. at La Crosse, Wis., has been opened by the Pierce-Stephenson Co., of Dexter, Minn., after a shutdown of two years. The plant was thoroughly overhauled and repaired.

The American Grain Co., Minneapolis, who owned an elevator and mixing and cleaning station at Belle Plaine, Minn., has been succeeded by McLaughlin, Ellis & Co., a partnership, with headquarters in Minneapolis.

A recent incorporation is the Bosch Grain Co., of Minneapolis, Minn., which is capitalized for \$50,000. Those interested are C. G. Bosch, Bertha J. Bosch, Davenport, Iowa; Arthur J. Eliel, Cedar Rapids, Iowa; R. O. Naegle, Minneapolis.

The temporary elevator at Duluth, Minn., that the Peavey interests constructed to afford a means of shipping the wheat out of the concrete annex, after the destruction by fire of the working house, has proven very satisfactory. The bulk of the grain has been shipped. The new working house, owing to delays incident to labor and material, will not be ready to go into commission as soon as the

Peavey people had hoped for. They had expected to have it ready by October 1, but it is now said that it may be as late as December 1.

Recently the Electric Steel Elevator Co. of Minneapolis amended its charter so as to incorporate a more general business in grain and by-products. The company is now empowered to build and operate elevators and mills.

The M. T. Dill Grain Co., of Prescott, Wis., has put in a new Fairbanks-Morse scale, with Savage & Love dump and has also remodeled its Diamond Bluff receiving house and installed a new hopper scale. The latter place has a capacity of 15,000 bushels.

It is possible the farmers of Eau Claire and Chippewa Falls, Wis., will combine in erecting and operating an elevator at one of these places. Thomas Emmerton of Cook's Valley is promoting the affair in the interests of the American Society of Equity.

John P. Coffey of Luverne, Minn., has acquired the H. R. Ries line of elevators, comprising plants at Gruner, Maple Hill, Armstrong, Neils Spur, Gridley, Iowa; Bricelyn, Walters and Ormsby, Minn. The head offices will be moved from Armstrong to Luverne.

A recent incorporation in Wisconsin is the Antigo Grain & Hay Co., which is capitalized at \$20,000. The principal place of business is to be at Antigo and the incorporators are John Wirtz, A. L. Sauby of Antigo and A. L. Wirtz, an elevator operator at Kaukauna.

The Western Elevator Co.'s new plant at Hasson, Minn., is in operation. The building is 26x33 feet on the ground and about 80 feet in height from the bottom of the foundation to the top of the cupola. It is equipped with a set of Fairbank's Standard Dump Scales, and the power used to elevate the grain is furnished by an 8-horsepower gasoline engine. A brick office building which also contains the engine is erected on the east side of the elevator.

#### OHIO, INDIANA AND MICHIGAN.

H. G. Stanley & Son of Beloit, Ohio, have bought a Hall Signaling Distributor.

The Glenmore Grain Co. succeeds Gehres, Dudley & Co. at Glenmore, Ohio.

B. I. Holger & Co., of Walkerton, Ind., have succeeded August Schultz in the elevator business.

An elevator the Ogenaw Seed & Grain Co., of West Branch, Mich., is building, is nearly completed.

The Weimer Grain Co. is reported to have succeeded the Judy & Weimer Grain Co. at Greenville, Ohio.

A two-story grain elevator, costing \$4,000, will be erected by the Southern Grain Co., of Cincinnati, Ohio.

Bartlett, Kuhn & Co., of Vincennes, Ind., will equip their elevator with an improved Hall Grain Distributor.

The Crabb-Reynolds-Taylor Co. has completed the rebuilding and improving of two elevators at Wingate, Ind.

Chatterton's elevator at Mt. Pleasant, Mich., has been enlarged to allow two wagons to unload at the same time.

Walter S. Harn and Thomas H. New of Greenfield have purchased the Shirley Elevator at Shirley, Ind., and will operate it.

Fred Friedline is preparing plans and specifications for Sam Finney of Chicago for a 50,000-bushel grain elevator at Wellsboro, Ind.

The Miami Grain Co. of Jamestown, Ohio, will erect an elevator of the latest type with all modern equipments, to replace the one recently burned.

George C. Wood, of Windfall, is rebuilding the elevator at Curtisville, Ind., which was recently destroyed by fire. It will be equipped with the latest machinery.

A second gasoline engine of 12-horsepower has been installed in the Caro Elevator Co.'s plant at Caro, Mich., together with new machinery which doubles its capacity for handling.

O. M. Ramlow, who had charge of the Stockbridge Company's elevator at Otter Lake, has bought an interest in the elevator at Melvin, Sanilac County, Mich.

Charles Billman has closed a deal with the Nading Mill and Grain Co., of Shelbyville, Ind., by which Mr. Billman becomes the owner of the flouring mill and elevator there for the reported consideration of \$26,000. The Nading Mill and Grain Co. owned and operated eleven elevators until recently, when the company became financially embarrassed, but later resumed business when it was agreed between the creditors and the



company to sell enough of the property to pay off the indebtedness. This is the first sale.

Daniel Russell of Marcellus, Mich., has disposed of his elevator to Floyd Burlington for \$4,000. The latter takes possession at once but Mr. Russell will remain until after the harvest.

Simon Wyandt of Van Wert, Ohio, has secured the contract to remove a grain elevator from Judyville, Ind., to Wellsboro, Ind. It will take about three months to complete the work.

Fred Friedline has the contract of Lyons, Esson & Light of Brook, Ind., to rebuild their elevator at Beaver City, Ind., which was recently burned. It will have a capacity of 30,000 bushels.

After twenty-five years in the grain business, C. A. Lundblad & Co. of Dayton, Ohio, have retired. Mr. Lundblad has exchanged his interests to G. A. Gustafson for a Minnesota farm.

Incorporation papers have been issued the J. J. Coon Grain Co., of Toledo, Ohio, with a capitalization of \$15,000. Those named are William E. Cummings, C. O. Wessendorf, Curland C. Coon, Avery W. Boardman and Harry B. Thompson.

Articles of incorporation have been issued by the Northwestern Elevator & Mill Co., of Toledo, Ohio, which is capitalized at \$250,000. Those interested are Rathbourn Fuller, John H. Taylor, Robert A. Hines, Cyrus S. Coup and George P. Hahn.

#### THE DAKOTAS.

A grain elevator is being built at Logan, N. D.

Another elevator is being built at Barney, N. D.

A new elevator is building at Edmunds, N. D.

A farmers' elevator is going up at Sawyer, N. D.

A fourth elevator is going up at Turtle Lake, N. D.

A new elevator at Medberry, N. D., has been opened.

A 45,000-bushel elevator will soon be built at Sanborn, N. D.

A new elevator is about completed at Langdon, N. D.

Glover & Son are constructing an elevator at Glover, N. D.

Shelden Bros. are erecting a grain elevator at Presho, S. D.

The elevator recently burned at Bath, S. D., is being rebuilt.

The Royal Elevator Co. is building an elevator at Sawyer, N. D.

M. W. Nelson is erecting another elevator at Grano, N. D.

A Farmers' Elevator Co. at Verona, N. D., is being organized.

Repairs are being made on the Crown Elevator at Westport, S. D.

The Lyon Elevator Co. is building an elevator at Diesem, N. D.

E. P. Ashford of Rondell, S. D., will erect an elevator on his farm.

Sim Mason is building an elevator on his farm at Anderson, N. D.

Wegley Bros.' new elevator at Williston, N. D., is nearing completion.

Work will begin at once on a new farmers' elevator at Goodwin, S. D.

H. C. Leuth of Spencer, S. D., is building an addition to his elevator.

R. A. Fox is erecting a new 35,000-bushel elevator at Towner, N. D.

The Atlas Elevator at Bee Heights, near Miller, S. D., is almost finished.

William O'Loughlin will operate an elevator of his own at Sterling, N. D.

The Farmers' Elevator at Pingree, N. D., was recently opened for business.

T. F. Miller of Hector, Minn., has rented an elevator at Emrick, N. D.

The Minnekota Elevator Co. has opened its west end elevator at Minto, N. D.

N. J. Olson of Minneapolis is building a new elevator at Cooperstown, N. D.

The new annex to the Van Dusen Elevator at Andover, S. D., is completed.

Almont, N. D., will soon have a 46,000-bushel grain elevator in operation.

A fifth elevator of 20,000 bushels' capacity is being built at Geddes, S. D.

A new elevator will be erected by the Acme Elevator Co. at Towner, N. D.

The St. John Grain Co. is erecting an addition to its elevator at Spencer, S. D.

A. J. Norby, a banker of Sisseton, will build the sixth elevator at Florence, S. D.

Work has been commenced on the remodeling of the Crown Elevator at Frederick, S. D., and

an engine is to be installed in place of horse-power.

At Wolford, N. D., the Acme Grain Co. has acquired the Douglas Elevator.

The D. S. B. Johnson Elevator will be a new addition to the town of Marion, N. D.

S. H. Winkenweder and Tom Zirkle are building an elevator at Gardena, N. D.

Dirks Bros.' new grain warehouse at Reliance, S. D., is completed and in operation.

The Spaulding Elevator Co. is erecting elevators near Forest River and Rolette, N. D.

A 30,000-bushel elevator is being built for the Farmers' Elevator Co. at Bryant, S. D.

C. E. Anderson of Ortle Station, S. D., has commenced the building of an elevator.

Huntimer & Larson have purchased an elevator at Colton, S. D., and are remodeling it.

A third elevator with a capacity of 30,000 bushels is going up at Esmond, S. D.

A 25,000-bushel elevator is being built by the Farmers' Elevator Co. at Ferney, S. D.

The Reliance Elevator at Ortle Station, S. D., is completed and G. G. Ray is in charge.

The Irwin Grain and Land Co. have about completed their new elevator at Blunt, S. D.

F. G. Enger of Mayville, N. D., recently purchased the Grandin Elevator at Ames, N. D.

F. H. Hooper and Mr. Reagan will build an elevator at Leola, S. D., in the near future.

Southall Bros.' Grain Co., of Minneapolis, will build a 30,000-bushel elevator at Martin, N. D.

It was expected to have the new Pochler Elevator at Eureka, N. D., ready September 10.

The Chicago Ranch has secured the Monarch Elevator Co.'s elevator at Montpelier, N. D.

New hoisting machinery has been installed in the Farmers' Elevator at Lidgerwood, N. D.

At Ayr, N. D., the Cargill Elevator Co. has razed its old elevator and is building a new one.

An elevator is being erected by the Northwestern Grain Co. in the new town of Wenoken, N. D.

Edward Reinhardt of Stewart, Minn., has purchased the Rusch Elevator at White Rock, S. D.

At Erwin, S. D., the Farmers' Elevator Co. is completing an elevator of 30,000 bushels' capacity.

Repairs will be made on the old elevator belonging to the Great Western Elevator Co. at Steele, N. D.

The Powers Elevator Co. is overhauling its plant at Eldridge, N. D., and building a new office.

The Portland Farmers' Elevator Co., of Hillsboro, N. D., has leased its house to the Crookston Milling Co.

A recent incorporation is the Farmers' Elevator Co. of Crystal, N. D., which is capitalized at \$50,000.

Grain was received at the new Marshall-McCartney Elevator at Fullerton, N. D., early in September.

The Farmers' Elevator Co. of Williston, N. D., with a capitalization of \$10,000, has been incorporated.

The Independent Elevator Co. has decided not to erect an elevator at Bradley, S. D., but will build at Wallace.

The Imperial and Bowman Lumber companies will erect five elevators at Florence near South Shore, S. D.

A 35,000-bushel grain elevator is being erected at Niles, N. D., by the Hilman Mercantile Co. of Grand Forks.

An elevator of 45,000 bushels' capacity will be erected at Valley City, N. D., by the Farmers' Elevator Co.

Ely Salyards & Co., of Duluth, Minn., will operate the State Elevator at Minto, N. D., as an independent concern.

M. C. Egan is building a 30,000-bushel elevator at Tagus, N. D., and there are rumors of another elevator.

An elevator is being built in the new town of Dover, N. D., with 30,000 bushels' capacity, by T. H. Cousins.

The Duluth Elevator at Neche, N. D., has been sold to the Neche Grain & Live Stock Co., a farmers' corporation.

The Osborne-McMillan Elevator Co. has doubled its storage capacity by building a new elevator at Velva, N. D.

Recently the Grand Harbor Farmers' Elevator Co., of Grand Harbor, N. D., was incorporated with a capital stock of \$10,000. The incorporators are Herman Thompson, Devils Lake; P. G. Crilly, Is-

rael Johnson, O. N. Dion and W. E. Powell of Grand Harbor.

The Farmers' Elevator Co., of Deering, N. D., has been granted a charter. The capital is \$8,000.

A 25,000-bushel elevator is being built adjoining the old one at Oriska, N. D., by the Western Elevator Co.

C. L. Merrick & Co. of Napoleon will at once commence the erection of a 20,000-bushel elevator at Kintyre, N. D.

A. J. Riger of Webster, S. D., has completed a new elevator, the first of four to be erected in the new town of Wallace.

A stone foundation is being put under the Atlas elevator at Houghton, S. D., and a new gasoline engine is being installed.

The Miller Elevator Co. contemplates a line of elevators along the Great Northern survey, starting at Bowbells, N. D.

The elevator of the Andrews & Gage Co. of Tower City, N. D., is being enlarged and the capacity will be doubled.

Max Stewart and Walter J. Doheny of Rugby, N. D., have leased the Farmers' Elevator and will operate it in the future.

The Independent Elevator Co., of Peever, S. D., is building a 20x20 foot addition to its elevator, to be used as a warehouse.

A new elevator is being built by the Exchange Elevator Co. on the site of the one recently burned at Eureka, S. D.

The Columbia Elevator at Westport, S. D., which burned last winter, is being rebuilt and will be operated by Will Anderson.

The Round Elevator of Millbank, S. D., is undergoing considerable repairing and a new distributing spout will be built.

F. L. Smith of Armour will build an elevator at Avon, S. D., on a site granted by the Chicago, Milwaukee & St. Paul R. R.

Negotiations are in progress for the purchase of the Armenian Elevator Co.'s elevator at Sherwood, N. D., by the new Farmers' Co.

Improvements which will increase the capacity of the Farmers' Elevator at Bath, S. D., from 7,000 to 12,000 bushels, are being made.

W. W. Sparks of Rapid City, S. D., recently acquired the Western Elevator Co.'s plant at Geddes, S. D., and will operate it this year.

The Florence Farmers' Elevator Co. of Florence, S. D., will build an elevator. Edward Short is in charge of the sale of stock.

Four elevators are building at Stanley, N. D. The St. Anthony & Dakota Elevator Co.'s plant will be of 36,000 bushels' capacity.

Frank Theisen of Artesian, S. D., recently purchased the Larkin & Thompson Elevator and placed S. J. Underhill in charge.

Recently the Great Western Elevator Co. acquired the elevator at Fabian, N. D., and put Mr. Baird of New Rockford in charge.

Robert Keehn of Glencoe, Minn., has recently completed an elevator at Attrel, S. D., and is building another at Granville, N. D.

A new elevator is being built a few miles out of Elkton, S. D., by the Davenport Elevator Co. and will be in charge of Frank Ripley.

The Chamberlain Investment Co., of Chamberlain, S. D., is equipping its elevator with an improved Hall Signaling Grain Distributor.

The Farmers' Elevator Co. of Deering, N. D., has awarded the contract for a 16-bin building of 40,000 bushels' capacity to cost \$7,025.

The Stenchcomb Elevator at Carpio, N. D., has been moved to a new location and its capacity has been enlarged about 15,000 bushels.

The South Dakota Farmers' Elevator Co. is the new name of the Verdon Farmers' Elevator Co., which is going to build at Verdon, S. D.

O. J. Seiler of Jamestown, N. D., is building two elevators on his farm with a capacity of 3,000 bushels. He harvests a 10,000-bushel crop.

A new elevator has been completed on the Fairview Farm, at Britton, S. D. It is furnished with a concrete basement and feed mill.

Jacob Nacht and C. C. Buechler of Kulm, N. D., have each purchased from Jacob Brost a third interest in the Brost Elevator at Gackle.

Andrews & Gage will build an annex to their elevator at Carrington, N. D. This will give them a storage capacity of about 40,000 bushels.

Daniel O'Conner of St. Thomas, N. D., has sold his elevator to the Occidental Elevator Co., which is closely allied to the Russell-Miller Milling Co.

It is reported that about eighty applications have been filed for elevator sites in the three new towns along the extension of the Chicago & Northwestern Railroad, which is building through



Gregory County, South Dakota. It is understood but three elevators will be allowed in each town.

It is understood the Minot Elevator Co. will erect a 40,000-bushel elevator at Grand Forks, N. D., to cost \$7,000. A Minneapolis firm has the contract.

Work on the new Scroggs Elevator at Carthage, S. D., is completed, a new cleaner of 4,000 bushels' capacity and a new gasoline engine being installed.

O. P. Enerson and John Norberg are building a 40,000-bushel elevator at Hastings, N. D., which will contain 23 bins and a complete line of cleaning machinery.

F. M. Ryan, proprietor of the Pioneer Store at Artesian, S. D., has consolidated his business interests with those of J. C. Bennett, owner of the Bennett Elevator.

The Duluth Elevator at Irene, S. D., has been sold to the S. D. Elevator Co., with T. F. Diefendorf as manager. Irene now has two independent and two old line elevators.

The Ray Elevator Co., of Ray, N. D., was recently incorporated with a capital of \$10,000. The incorporators are C. W. McGee, Ray; H. A. Nelson, Hofflund; W. V. Linwell, Norwood.

Cook Robinson of Tasker, N. D., is erecting a flat house for grain and in the spring will build an elevator. The latter is not possible now because of the scarcity of lumber.

A. A. Robinson's elevator at Minot, N. D., has been resputed above and below and fitted with an entire new set of machinery. The elevator is able to handle 1,000 bushels per hour.

The Harvey Grain Co., of Harvey, N. D., has been incorporated by Herman Phillips, George D. Riesland, Harvey and Edward F. Volkman of Fessenden. The company is capitalized at \$10,000.

F. J. Brown took possession of the Dougherty Elevator at Britton, S. D., for A. Owen, who recently purchased it. He has had the old coal sheds torn down and work commenced on new buildings.

Isaak & Keim Bros. are building an addition to their elevator office at Eureka, S. D., to better accommodate a feed grinding plant. They are also having a new dump wagon scales put in at the elevator.

A new fireproof elevator will replace the Empire Elevator, burned at Groton, S. D. A large quantity of the several thousand bushels of grain it contained has been saved and is being temporarily cared for.

Articles of incorporation for the Farmers' Grain & Supply Co., of Wyndmere, N. D., have been filed by C. W. Cary, E. W. Cary, A. J. Van Fleet, Lidgerwood; George Blake and Martin Jones, Wyndmere. It is capitalized at \$25,000.

Col. John Ely of Cando, N. D., recently secured the controlling interest in the Farmers' Elevator Co., the Atkins Bros., and other stockholders selling the entire property to Col. Ely and T. V. Lowe for a consideration of \$3,500.

H. J. Hanson is having an elevator erected, complete with gasoline engine, scales and other necessary machinery, on his fine section farm six miles southeast of Litchville, N. D. It will be of about 5,000 bushels' capacity.

The Gribbin-Alair Grain Co. was recently incorporated at Bowdon, N. D., with a capital of \$60,000. The incorporators are Thomas Gribbin, Minneapolis, P. Kremer, Mangorra, Minn., and E. E. Alair, New Rockford, N. D.

The South Dakota Elevator Co. of Irene, S. D., has received articles of incorporation and has elected the following officers: P. F. Connelly, president; E. D. Skillman, secretary and treasurer; T. F. Diefendorf, general manager.

The Farmers' Elevator Co., of Brinsmade, N. D., will build a 40,000-bushel addition to their grain elevator, the contract having been let to L. Buege of Minneapolis. It will be equipped with the most modern machinery, including weighing-out scales.

The Farmers' Union Elevator Co. of Webster, S. D., has decided to build a wheat mixing house at Glencoe, Minn., adjoining its present elevator. The dimensions of the mixing house are to be 58x32 and 60 feet high, and work upon the same will commence as soon as possible.

D. J. Hennesy, of the National Elevator at Reynolds, N. D., has been overhauling his plant, putting in a new grain hopper, scoops, shafting, pulleys and a number of other improvements. A gasoline engine of 10 horsepower was installed and has a handling capacity of 36,000 bushels a day.

The Red River Milling Co. of Fergus Falls, Minn., has decided to engage in the elevator business and its officers have incorporated a new company to be known as the Ceres Elevator Co. The new company will erect elevators at Adrian and Barney, N. D., immediately, and at other points later.

Officials of the M. & St. L. Ry. have recently assigned elevator sites in each of the new towns on their line in the Dakotas, between Mellette and Scranton.

#### MISSOURI, KANSAS AND NEBRASKA.

A new elevator is to be built at Abdal, Neb.

A Mr. Neihart is building an elevator at Carbondale, Kan.

W. F. Rhinehart has built a grain elevator at Cimarron, Kan.

An elevator is being built at the new town of Arborville, Neb.

Work on the new elevator at Rockford, Neb., is nearing completion.

The Pickrell Farmers' Elevator Co. of Pickrell, Neb., will enlarge its elevator.

The Hayes-Eames Elevator Company has increased its power at Adams, Neb.

A 30,000-bushel elevator is being erected at Canton, Kan., by the Inman Milling Co.

A new grain warehouse has been completed by the B. & M. Milling Co. of Adams, Neb.

P. M. Kelley, whose elevator at Hiawatha, Kan., was burned recently, will rebuild at once.

Henry Roberts is setting up an improved Hall Distributor in his elevator at Herman, Neb.

Guy Briggs and Charles Kracht of Crofton, Neb., are erecting a 45,000-bushel elevator.

Matthews & Copeland have purchased the Jones Grain Co.'s elevator at Liberty, Neb., for \$5,800.

Frank A. Groninger of St. Joseph, Mo., will engage in the grain business at Wynnewood, I. T.

A new \$1,200 addition is being built by the Nye-Schneider-Fowler Co., on its elevator at Howells, Neb.

Theodore Uehling of Uehling, Neb., will sell his elevator to the Farmers' Elevator Co., for \$4,800.

At Norfolk, Neb., the Omaha Elevator Co. recently opened its elevator with Zell McGinnis in charge.

Kent & Burke of Silver Creek, Neb., have ordered another improved Hall Signaling Grain Distributor.

Henry Altringer & Co., grain dealers, are reported to have succeeded Henry Altringer of La Due, Mo.

G. H. Birchard has ordered an improved Hall Signaling Distributor for his new elevator at Rockford, Neb.

Filley, Neb., will have a new elevator, to be built by A. L. Stanhope. It will be 36x36 feet and 40 feet high.

The Uptide Grain Co., of Dwight, Neb., recently purchased an improved Hall Signaling Distributor for its elevator.

Work has commenced on the rebuilding of the Hoffman Elevator at Arlington, Kan., which was recently destroyed by fire.

Feutz & Barney of Rush Hill, Mo., have changed their firm name to Feutz, Barney & Co., and will continue to deal in grain.

The Harper Mill & Elevator Co. has installed a new three-horsepower gasoline engine in their elevator at Crystal Springs, Kan.

The Hoag Farmers' Elevator is completed and in operation at Beatrice, Neb. It cost \$6,000 and has a capacity of 20,000 bushels.

The T. B. Hord Grain Co., of Central City, Neb., is adopting the Hall Non-chokable Boot in the three new elevators it is building.

H. G. Heyne and his father have purchased a grain elevator at Uehling, Neb., which will be in charge of John A. Heyne of Pender.

R. P. Cummings of Lebanon has secured the west elevator at Beaver City, Neb., and after making repairs will open it for business.

T. J. Malone & Son recently purchased a Hall Non-chokable Boot and an improved Hall Signaling Distributor for their elevator at Enold, Neb.

The Missouri & Kansas Grain Co., of Neosho, Mo., have moved its elevator at Statesbury to Neosho and have converted it into a corn-meal mill.

A new elevator being erected at Beemer, Neb., by a Mr. Freid, will have a Hall Signaling Grain Distributor and other modern appliances for rapid work.

The Stack-Fuller Grain Co., of St. Louis, Mo., has been incorporated by Buckman L. Stack, Henry G. Craft and James W. Filler, with a capitalization of \$10,000.

Articles of incorporation of the Farmers' Cooperative Grain Association of Edison, in Furnas County, Neb., have been filed. The capital stock is \$3,000 and the incorporators are Hugh Gibson, W. A. Martin, J. W. Melroy, J. M. Manley, J. C.

Sanderson, Ben Osborn, C. A. Miller, J. Shindler and H. Lehoenberger.

H. Fose & Co. are reported as having succeeded W. H. Morrison in the grain business at Russell, Kan.

Black Bros., of Beatrice, Neb., will enlarge their elevator from 15,000 bushels' to 40,000 bushels' capacity and will also build a new flume for their power plant.

Robert Elmore has acquired the site of the elevator recently burned at Lyndon, Kan., and with a Mr. Stevens as an associate will erect a new \$5,000 plant.

Dave Stump, who is understood to be working for the interests of the Quenemo Mill & Elevator Co., recently acquired the elevator at Lyndon, Kan., from Mr. Rose.

The Merriam & Holmquist Co. is making some repairs on its new terminal elevator at Omaha, Neb., and is installing the Hall Signaling three-duct Garner Distributor.

Thomas J. Brodnax, former president of the Kansas City Board of Trade, and Robert Fleming of Mound City, Kan., contemplate building a grain elevator at the latter place.

Recently the Otto Weiss Alfalfa Stock Food Co., of Wichita, Kan., purchased the 15,000-bushel elevator at Andover, Kan., which has been idle for some time, and will operate it.

The Farmers' Milling & Grain Co., of Bloomfield, Mo., has been chartered with N. W. Brannock, W. E. Alexander and A. A. Sitz as the incorporators. The capital is given at \$10,000.

Recently the Terwilliger-Dwight Elevator Co. of Laurel, Neb., was dissolved and the property divided between George Terwilliger and H. H. Dwight. The former will operate the plant at Laurel.

Four new elevators are to be built by the Beatrice Cereal Mills of Beatrice, Neb. The plants will be located in various parts of the state. Among the sites under consideration are Ohioa, Stanton and Courtland.

The Central Granaries Co. is installing the Hall Signaling three-duct Garner Distributor in its terminal elevator at Lincoln, and have also ordered a Hall Signaling Distributor for the elevator at Ong, Neb.

The Pauline Grain and Supply Co. of Pauline, Neb., filed articles of incorporation, with a capital of \$6,000, the signers being John Evans, C. Peterson, F. C. McCormick, Ben Sherman, Ernest May, Henry Wehnes, C. P. Sorenson, James H. Sherman and M. J. Fouts.

#### EASTERN.

Theodore Fecteau has just completed repairs on his elevator at Westville, N. H.

Copeland & Co., of North Hanson, have leased a building for the storage of grain at Center Hanover, Mass.

The elevator of the Millbury Grain Co. of Worcester, Mass., has been enlarged and improvements made.

George A. Stanley and John H. Hurley of Lawrence, Mass., have purchased a lot 210x388 feet deep for \$25,000, on which it is understood the Stanley Grain Co. will erect buildings.

The Farmers' Mutual Exchange has been incorporated at Myersville, Md., with a capital stock of \$10,000, and will erect a grain elevator. George T. Gaver is president, Cyrus F. Flook, secretary and George H. Harp, treasurer.

Griswold & Adams, of Dalton, Mass., have commenced the building of an addition to their grain warehouse. The building will be 30x50 feet in dimensions and two stories high. A railroad switch is being so placed as to allow easy loading.

The Wallace Grain Co. of Clinton, Mass., was recently incorporated with a capital stock of \$5,000. It is proposed to deal in hay, grain and straw. F. F. Wallace, of Clinton, is president and J. W. Perry of North Wilbraham, treasurer.

The Syracuse Grain Warehousing Co., of Syracuse, N. Y., has been incorporated to deal in grain, flour, etc. The company is capitalized at \$5,000, and is represented by F. M. Barker, F. C. Wolfman, L. Dillingham, Syracuse and H. S. Jewell, Buffalo.

Charles F. Brown of Roberts, Ill., has purchased the mill site of the Burnham & Todd Lumber Co., of Greenfield, Mass., and will erect a two-story grain elevator and mill to handle the products of his farms in Illinois as well as to conduct a general business.

L. N. Littlehale of Rockland, Me., will erect an elevator two stories and a half high which will have a capacity of 25,000 bushels of corn and oats and about the same in mill feeds and flour. It will be equipped with ship elevator and machinery for handling both bulk and bag grain. An electric motor will be installed. Mr. Littlehale



is the owner of two schooners and last year transacted a grain business exceeding \$125,000, the result of thirteen years' progress.

H. W. Kapp, 'general agent of the Pennsylvania Railroad Co., is credited with the announcement that the company will erect grain storage bins to be operated in connection with Elevator No. 3 at Canton, N. Y. Bins with a capacity of 500,000 and 1,000,000 bushels are being considered. They will be constructed of reinforced concrete.

After more than twenty years of activity in the grain business the firm of Edson & Bailey of Littleton, N. H., has been dissolved and is succeeded by Edson & Kinne. The senior member, Harold A. Edson, of the new firm, is a son of George Edson of the old firm, and Harvey Kinne has been a clerk for the retiring partners for over a dozen years.

#### SOUTHERN AND SOUTHWESTERN.

S. E. Dupuy of Ouray, Colo., has sold his grain business.

Cleft Bros. of Hastings, are erecting an elevator at Marlow, Okla.

D. L. Upton of Colorado Springs, Colo., is building a new elevator.

Taylor & Co., of Union City, Tenn., have disposed of their grain business.

A 30,000-bushel elevator is being erected at Pryor Creek, near Dennison, Texas.

It is rumored the Empire Grain Co will build a large elevator at Oklahoma City, Okla.

The new elevator at Manhattan, Mont., is nearing completion. It is sided with steel.

G. A. Knight & Son of Dallas, Texas, may have a new building erected for their grain and feed business.

The Farmers' Union Gin & Elevator Co., of Hinton, Okla., has been organized with a capital stock of \$30,000.

The Farmers' Warehouse Co., of Newville, Ala., has been incorporated by J. T. Griffin, L. T. Hutts and others.

The Indian Territory Farmers' Union will erect a warehouse at Ardmore, I. T., which will cost about \$8,000.

Jabe C. Reader has purchased an improved Hall Signaling Grain Distributor for his elevator at Houston, Texas.

R. W. Coleman is setting up an improved Hall Signaling Grain Distributor in his elevator at Broomfield, Colo.

The Davidson Mill & Elevator Co., of Muskogee, I. T., has nearly completed an elevator with a capacity of ten carloads.

The Dunlop Milling Co., of Dunlop, Tenn., is erecting four new elevators with a capacity of 250,000 bushels in connection with a new 1,000-barrel flour mill.

The Dabney Brokerage Co. of Newport News, Va., has ordered plans and specifications of Fred Friedline for a cleaning and sacking elevator at that place.

A recent incorporation is the Josey Grain Co. of Texarkana, Texas, which is capitalized for \$10,000. The incorporators are W. C. Josey, J. A. Hurley and A. V. Denny of Texarkana.

Recently the Texas Farmers' Union decided to build grain storage warehouses at various places in the Texas panhandle with large central elevators at Dallas and Galveston.

At Nashville, Tenn., the Tennessee Grain Co. has been incorporated with a capitalization of \$10,000. The incorporators are D. V. Johnson, J. B. McLemore, Eugene McBride, D. B. McBee and M. B. Felts.

The Rives Grain Co. of Obion County, Tenn., has been incorporated with a capitalization of \$10,000. The incorporators are Wade Wiley, W. A. McNeill, G. T. Taylor, A. M. Taylor and W. H. Gardner.

A recent incorporation is the Amarillo Mill and Elevator Co. of Amarillo, Texas, which is capitalized at \$20,000. The incorporators are John F. Monning, W. H. Prater of Amarillo, H. A. Prater of Dalton, Ga.

T. B. Jones & Co.'s 100,000-bushel grain elevator at Memphis, Tenn., was placed in operation September 10, and will be all completed by October 1. The elevator was built by Fred Friedline and has special features for the rapid and economical handling of grain in bulk and sacks.

Fred Friedline is rebuilding Davis & Andrews' grain elevator at Memphis, Tenn. It will have an increased storage capacity of 45,000 bushels, and a handling capacity of 9,000 bushels per hour. The washing equipment includes one stand of elevators, with 22x7-inch buckets. The plant will

have a 100,000-bushel Fairbanks hopper scale, a feed mill and other essentials.

The Valley Grain and Commission Co., recently incorporated at Hot Springs, Ark., has a capital of \$10,000, of which \$5,000 has been subscribed. The incorporators are Sherman Irish, C. H. Lanier, Caroline Samstag and C. J. Samstag. This company will buy and sell grains, grain products, hay and other feed, farm seeds, etc.

The J. F. & S. L. Dodds Co., Edward Prather and the Dohnke-Walker Milling Co. of Hickman, Ky., have organized the Hickman Grain Co. and will erect buildings in which the latest machinery will be installed. The company will put in a gasoline ferry to transport grain purchased across the river.

The new 15,000-bushel elevator of the Midland Mill and Elevator Co., at Skiatook, I. T., is completed and makes the second elevator in the town. Last year more than 50,000 bushels of grain were dumped in the open, waiting shipment. There are prospects of at least a corn crop of 200,000 bushels this year in that vicinity.

The announcement is made that the New Orleans Terminal Company is ready to let contracts for the erection of a grain elevator and a power house at its Chalmette terminal, the cost of which will be approximately \$1,000,000. The elevator will have storage capacity of 1,500,000 bushels. It will be built of reinforced concrete and be fireproof.

#### CANADIAN.

A farmers' elevator is being erected at Midale, Sask.

O. Baker will erect an elevator at Vermillion, Alta., this fall.

The Western Elevator Co. will erect an elevator at Melfort, Sask.

C. Cartwright has opened a flour and feed store in Crandall, Man.

Melady & Co., grain dealers of Toronto, Ont., have dissolved partnership.

Montgomery & Woolley, grain dealers of Brantford, Sask., have retired from business.

A new elevator is being erected at Dana, Sask., by the Western Canada Farmers' Elevator Co.

John A. Snell and Frank W. Bull have begun building a 40,000-bushel elevator at Yorkton, Sask.

J. G. McConnell of Hamiota, Man., has sold his flour and feed business to the Imperial Elevator Co.

J. L. Rae & Son, grain dealers of Oil Springs, Ont., have disposed of their business to Hay Bros.

The Miniota Lumber & Grain Co., Ltd., of Miniota, Man., has sold its business to the Imperial Elevator Co.

The Northern Elevator Co. has sold its elevator at Roland, Man., to a Duluth grain firm. It will be moved to a position some twenty rods away.

During the past year the towns of Elgin, Fairfax and Underhill, Man., within six miles of each other, have shipped 1,000,000 bushels of wheat out of eleven elevators.

Herbert Dial has purchased the Farmers' Elevator at Elgin, Man., and Mr. Magee, who has been managing that plant, will succeed Mr. Dial as manager of the Winnipeg Elevator Co.

Henry G. Anderson, of H. G. Anderson & Co., grain merchants of Buffalo, N. Y., has let contracts for the erection of an elevator at Edmonton, Alta., and will take personal charge.

The Campbell Milling Co., of Toronto Junction, Ont., is making extensive improvements and additions to its property. One of these is a large iron-clad, slate-roofed elevator with a capacity of 120,000 bushels of grain.

The Smith Grain & Commission Co., of Winnipeg and Minneapolis, have given George Morin, the Argyle contractor, orders for seven elevators to be built on the Pleasant Hill branch of the Canadian Pacific Railway. Will Platt will install the machinery.

The Alexander Milling Co., of Brandon, Man., has concluded the purchase of the Lewis Elevator at Alexander, with a capacity of 30,000 bushels. The company now has six elevators, one each at Abernethy, Balcanes, Alexander, Kemnay and two at Brandon. Arrangements are pending for the purchase of two other elevators.

The British-American Elevator Co., Ltd., (Peavey System), has been incorporated in the Dominion of Canada with a capital stock of \$500,000 and will have headquarters at Winnipeg, Man.

Letters of incorporation have been issued to the McCabe Elevator Co., the incorporators being George Henry McCabe, grain dealer of Grafton,

N. D.; James McCabe, Minneapolis; William John McCabe, Wilton; Matthew McCabe, grain dealers, and George Wilson, accountant, of Duluth. The capital stock is \$150,000 and the headquarters of the company will be at Winnipeg.

March Bros. of Winnipeg, Man., sold their line of twenty-five elevators which they have operated in Manitoba, to the Canadian Elevator Co. Col. March stated they did not care to sell, but received an offer they simply couldn't resist. It is reported \$150,000 was paid.

A report from Port Arthur, Ont., says: "Notwithstanding the denial of C. N. R. officials that there was any truth in the rumor that the Peavey Company had secured control of the railway's large terminal elevators here, it is again stated that the American company will assume control of these elevators."

The Grain Growers' Grain Co., Ltd., of Winnipeg, Man., was recently incorporated. The capital stock of the company is placed at \$250,000, and its incorporators, who are all farmers, are: W. A. Robinson and John Spencer, Winnipeg; E. A. Partridge, Sintaluta; Francis Graham, Melita, and John Kennedy, Swan River.

It is learned that the British-American Elevator Co. (Peavey System) has let the contract for the first of the string of twenty elevators which it proposes to erect in Canada. The company will first begin building operations in northwestern Manitoba and in northern Saskatchewan and Alberta. Next year operations will be extended over the entire Canadian Northern system.

Letters of incorporation have been granted to the Saskatchewan and Western Elevator Co., of which the incorporators are: James J. Sinclair, farmer, of Stephen, Minn.; John Sinclair, grain buyer, of Argyle, Minn.; Frank E. Topper, grain buyer, of Radisson, Sask.; John T. Haig, and Charles E. Williams, Winnipeg. The capital stock is \$200,000 and the headquarters of the company will be at Winnipeg.

#### WESTERN.

The Puyallup Mercantile Co. of Puyallup, Wash., has commenced a new grain warehouse.

W. W. Robinson has let the contract for his new grain warehouse at Ellensburg, Wash., which will be 100x200 feet in size.

The Moscow Grain Co. is erecting a warehouse and elevator at Bluestem, Wash., which has a capacity of 140,000 bushels.

Kerr, Gifford & Co., grain exporters and lessees of the London Dock at Tacoma, Wash., have decided to reopen their establishment after having been closed for two seasons.

Thirteen new grain warehouses are being erected in Whitman County, Wash. The Kerr, Gifford Co. is building at Pampa, Meeker, Hay, La Crosse, Willada, St. John, Seltice, Wheaton and Lees Siding. The Interior Warehouse Co. is building at Cañon, Pampa and La Crosse and the Pacific Coast Elevator Co. is putting up a building at Lees Siding.

The Great Northern R. R. has arranged to increase the size of its new warehouse at Ellensburg, Wash., from the original plans, to a capacity of 1,000,000 bushels. The structure will be 150 feet wide and extend out from its shore end to a distance of 800 feet, to a point where the present water depth is thirty-two feet, low tide. It is expected to have the work completed by October 10.

F. W. Maxwell, of the St. Joseph (Mo.) Commercial Club, declares shippers will be given free time for shipment and reconsignment by the railroads of that section, until October 15, and it is possible the latter may recede entirely from their stand which allows grain and hay men but twenty-four hours.

In a recent edition of the Wall Street Journal, of New York City, the barley crop is given considerable attention. The paper estimates the year's yield will reach nearly 150,000,000 bushels. Continuing it says: "Brewing industries at home and abroad are directly interested in the barley crop. Of these establishments there were over 1,500 in the United States in 1900, with a capital of \$415,284,000, engaged in the manufacture of malt liquors alone. Nearly a thousand more are engaged in distilling liquors. This season's barley crop promises to be phenomenally good. The production in 1905 was 136,651,000 bushels at an average farm value of 40 cents a bushel, aggregating an income of \$55,047,166 to the growers. The crop for the past four years has been quite uniform. In 1901 it was as low as 110,000,000 bushels, and in 1904 as high as 140,000,000 bushels. Exports of barley last year totaled 17,729,960, or 12.5 per cent of the crop. For the two preceding years the exports were 11,000,000 bushels."



## COMMISSION

The American Grain Co. of Minneapolis has been succeeded by the McLaughlin Ellis Co.

E. L. Welch & Co., grain commission, of Minneapolis, have incorporated as the E. L. Welch Co.

Scotten & Snyder, Chicago, who have been conducting a general commission business, have embarked in the grain receiving trade and have enlarged their office force.

H. R. Hale, for several years with Irwin, Green & Co. of Chicago, and later with Ware & Leland, has left Chicago to accept a position with the Northern Bank of Winnipeg, Man.

The British American Elevator Co., the Peavey company in Canada, has let the contract for a string of twenty elevators along the Canadian Northern in northwestern Manitoba, northern Saskatchewan and Alberta.

Receiver Edwin C. Day has paid creditors of W. H. Laidley & Co., Chicago, a dividend of 3.22 per cent of their claims. The Laidley house failed nearly two years ago and the amount mentioned above is all that creditors will realize.

E. M. Higgins, vice-president of the Armour Grain Co., Chicago, will retire from business March 1 and devote his time to travel abroad. He has been connected with the Armour house since 1890 and is said to have acquired a fortune.

It is announced that the firm of John Berger & Co., which has been identified for years with the Milwaukee grain firm of F. Kraus & Co., has severed its business relations with the latter house and become identified with the Berger-Crittenden Co.

John Lonsdale, who entered the firm of Logan & Bryan last spring, has taken charge of the New York office, succeeding Henry Nicolay, who had been manager for the past twenty years. Mr. Nicolay has retired from the firm because of ill health.

W. K. Mitchell, formerly with the Calumet and Western Elevator Co., and H. S. Kennedy, at one time secretary of the Millers' National Federation, have formed a partnership and will do a general grain business at Chicago, under the style of Mitchell & Kennedy.

The Standard Commission Co. of Chattanooga, Tenn., recently made application for a charter. The capital stock is \$15,000 and the incorporators are E. M. Smith, C. W. Howard, George W. Gorrell, W. B. Wight and Francis Martin. The company will do a general grain business.

The Charles D. Jones Company of Memphis, Tenn., has filed applications for a charter and will conduct a general grain business and operate a grain elevator. The company is capitalized at \$50,000 and the incorporators are R. B. Sims, Caruthers Ewing, C. H. Williams and H. H. Barker.

J. C. Shaffer & Co. of Chicago have opened an office on the Board of Trade at Omaha, Neb. C. D. Sturtevant is manager. The company operates the South Chicago C and D elevators and has lately taken possession of the Rock Island transfer elevator at Council Bluffs and will operate it.

The Bosch Grain Co. of Minneapolis has been incorporated with a capital stock of \$50,000, by Carl G. Bosch and Bertha Bosch of Davenport, A. J. Eliel of Cedar Rapids and R. O. Naegle of Minneapolis. The officers for the first year are: Carl G. Bosch, president; Arthur J. Eliel, vice-president, and Richard O. Naegle, secretary-treasurer.

W. J. Thompson, recently of the firm of W. J. Thompson & Co., grain and hay receiving firm of Chicago, is back again on the Board after a three months' absence. He has taken an interest in the firm of Wm. Rotsted Co., with main office and grain and hay warehouse at 63-65-67 West Kinzie Street, Chicago, on the C. & N.-W. and C., M. & St. P. team tracks. The firm has ample selling facilities and is one of the large receivers on the Chicago Board.

Albert Dickinson, head of the well-known seed company of Chicago bearing his name, on September 11 posted his Chicago Board of Trade membership for transfer. His withdrawal from the board is made necessary, he says, on account of the new commission rule put into effect March 1. There was no provision in the rule to conform to the methods which Mr. Dickinson claims are necessary in the handling of a legitimate merchandising trade in seeds where the property is dealt in by sample and not by grade. The company still owns twelve memberships on the

Board after the withdrawal of the president and secretary and these will be retained.

Charles R. Fowler has been appointed receiver for the Spencer Grain Co., Minneapolis, Minn., on a petition in bankruptcy filed by creditors who asserted that the Spencer Grain Co. had made a transfer of its business and an elevator valued at \$55,000 to John H. McMillan. In accordance with the order of the court Mr. McMillan has placed this property at the disposal of the receiver.

The firm of W. F. Johnson & Co., Chicago, was dissolved on September 1 by the retirement of Mr. Johnson. George A. Wegener, the remaining partner, has associated himself with George H. Sidwell & Co. and will continue the business through that house. Mr. Johnson started in the grain trade at Morrison, Ill., in 1856, and has been in the commission trade in Chicago for forty years.

Clark Fagg, formerly manager at Duluth and Milwaukee for the Van Dusen-Harrington Co., and A. K. Taylor, formerly manager for the Milwaukee Elevator Co., have associated themselves under the firm name of Fagg & Taylor for the purpose of doing a receiving and shipping business. They will operate Elevator B, an 800,000-bushel house located on the C., M. & St. P. Ry. at Milwaukee.

The J. J. Coon Grain Co. of Toledo, Ohio, has been incorporated with a capital stock of \$15,000, by Wm. W. Cummings, Christian O. Wessendorf, Courtland C. Coon, Avery W. Boardman and Harry B. Thompson. The business was formerly a partnership composed of Wm. Cummings, C. C. Coon and C. O. Wessendorf. The new directors are A. W. Boardman of the East Side Iron Elevator Co. and H. B. Thompson, a local attorney.

On September 1 the Waggoner Grain Co. of St. Louis announced that it would discontinue business and liquidate its affairs as promptly as possible. The business will be succeeded to by the Slack-Fuller Grain Co. B. L. Slack, who has been secretary and treasurer of the Waggoner Grain Co., and also secretary of the Brinson-Waggoner Grain Co., and connected with the grain trade in the St. Louis market for several years past, will be president of the new company. J. M. Fuller will be secretary. He has been connected with the Waggoner Grain Co. for some time and has been in charge of the handling of the coarse grains.

Hereafter the business of the United Grain Co., Toledo, Ohio, will be conducted by the old Paddock-Hodge Co. The offices of the two concerns will remain in Toledo, and, according to Arthur L. Mills of the company, the Paddock-Hodge Co. will carry on the active grain business which has up to the present been conducted by the United Grain Co. The latter concern will continue its offices in Toledo, but will not engage in any active trade operations. The United Grain Co. three years ago superseded the Paddock-Hodge Co. Now they are going back to the old firm name again. For the last few months the United Grain Co. has been in process of reorganization. It has disposed of some of its elevators in the Middle West. The Churchill brothers, who were formerly residents of Toledo, have retired from the United Grain interests and are no longer interested in the Toledo office of the United Grain Co. or the Paddock-Hodge Co.

## CHICAGO AS A LAKE PORT.

Chicago, for various reasons, chiefly because the tunnels under the river have made it impossible for the river improvements to keep pace with the requirements of navigation, has lost some ground as a lake port. Ten or fifteen years ago lake craft of any size could enter the harbor and the river; now the narrowness of the draw at Rush Street bridge and the shallow water above the roofs of the tunnels prevent the large vessels from navigating the river at all. Fifteen years ago the largest vessel on the lakes did not exceed 350 feet in length and 45 feet in beam. To-day the larger ships are from 500 feet to nearly 600 feet in length and from 55 feet to 60 feet in beam. With this great increase in the size of vessels every center pier bridge becomes an obstruction to navigation; yet the city of Chicago has bridges with draws of less than 55 feet. This is due to the fact that in many places the bridges have been located, not with a view to providing the greatest possible width of draw, but to fit the streets at which they cross the river. The tail pits of the new bascule bridge at State Street extend into the river a distance of 30 feet on each side, lessening the width of the channel by 60 feet.

Of course, a great deal of the grain business has gone to the Calumet elevators, but the decline of commerce of the Chicago River is not wholly offset by the tonnage at South Chicago. However, this decline has no great significance

as to grain, which seems to be seeking the rail routes rather than the waterways to the Atlantic seaboard.

Nevertheless the increased economy of the water routes carrying the new lake boats up to 10,000 tons' capacity, and the consequent deepening of lake channels from five or six feet at the shallow places to over twenty feet, has revolutionized traffic on the lakes, and Chicago River must be improved to give the city the benefit. The fact is demonstrated that a deep channel calls into existence vessels to correspond, and creates vast industries through the cheapness with which heavy freights of all kinds can be carried and delivered.

## THE EXCHANGES

A membership on the Minneapolis Chamber of Commerce recently sold for \$5,000, the top price to date.

The Chicago Board of Trade on September 5 voted down the proposition to reduce commission charges to the basis current before March 1, by a vote of 621 to 177.

Grain merchants on the Winnipeg Grain Exchange are recommending a "per diem" basis of terminal elevator charges, instead of the present basis of 15 and 30 day terms.

A new record was made in August in the price paid for seats on the Winnipeg Grain Exchange when three seats were sold for \$2,500 each. They were purchased by F. B. Wells, E. W. Kneeland and R. C. Evans, members of the Peavey Elevator Co. of Minneapolis.

There is talk of placing Sioux City, Iowa, among the grain markets of the West with the establishment of a live exchange there. Friends of the city, interested in its welfare, claim that the project is feasible on account of the large grain territory lying practically at the city's door.

The directors of the Chicago Board of Trade have declared the Union Elevator and Annex a regular house for the Armour Grain Co. It was formerly owned by the Harris-Scotten Co. The Armour Elevators St. Paul and Fulton Annex were declared no longer regular and are now being torn down.

That they are doing some business on the Minneapolis Chamber of Commerce is shown by the branch postoffice station in the building, which as estimated will sell over \$200,000 worth of stamps, envelopes and postal cards this year. This is on an estimate of the business done to September 30. Six carriers are stationed at the building and are kept busy handling and delivering the mail.

A complaint was brought against the Kansas City Board of Trade the latter part of August by certain interests on account of the rule which forbids members of the Board from transacting business with members of other organizations connected with bucket shops. The complaint, which threatened to lead into legal complications over the anti-trust law, which it was alleged the rule violated, led to nothing, and the rule stands. The prosecuting attorney declared that the Board was exempt, as the rule "was for the sole purpose of discouraging the unlawful practice of bucket-shopping and kindred abuses in the grain business, and was not for the purpose of either limiting competition or fixing the price in the grain business."

A meeting of a number of prominent members of the grain section of the Cincinnati Chamber of Commerce was held on September 3 to discuss a recommendation to the directors that a clause be added to the rules governing the grain trade fixing a standard commission to be charged for handling grain. It developed during the meeting that all sorts of commissions are charged and that competition has resulted in some very low figures. A committee, consisting of H. Lee Early, H. Edward Richter and John DeMollet, was named to make a thorough investigation of the commission charges in other cities, especially New York, Baltimore, St. Louis and Chicago, and formulate a scale of charges for the Cincinnati market. This committee will report back to the grain dealers, who will, after passing on the report, submit it to the proper officials of the Chamber of Commerce, with a recommendation that it be incorporated in the rules governing the grain trade.

A Mr. Arbogast of Bloomington, Ill., has met with splendid success on his treatment of oats for smut with formaldehyde.



## CROP REPORTS

Indian Territory has an exceptional corn crop.

The Texas corn crop is generally satisfactory.

Missouri corn is showing a trifle better this month than it did the middle of August.

Farmers in Utah have despaired of saving their crops, because of heavy rains.

Oklahoma reports tell of the largest corn crop in the state's history. The wheat yield is equally as good.

New York state promises the largest and best produced wheat crop in years. Other crops are reported good.

Heavy rains in Montana caused great damage to the crops and the winds flattened out the heavy oat and barley crops.

Reports from Kentucky show the wheat crop is turning out better than was expected and it is figured the corn crop will pass the 95,000,000-bushel mark set last year as the greatest in the history of the state.

It is said that a large percentage of the South Dakota wheat has been damaged in the shocks because of excessive moisture. Statistics appear to show the macaroni wheat is yielding far better than the common wheat.

Deputy State Grain Inspector King of Tacoma, estimates that Washington's wheat crop has been shortened by 9,000,000 bushels as a result of the dry, hot weather which prevailed through the greater part of the summer.

The Iowa Grain Dealers' Association predicts a 400,000,000-bushel crop, which will be the largest on record, unless frost overtakes the harvesters. C. A. King & Co., of Toledo, Ohio, say authoritatively three-fourths of this crop will be safe by September 20.

The Illinois Department of Agriculture states the wheat crop of the state is 33,563,943 bushels less than last year. The corn crop is 15 points lower than a year ago and 8 points less than on June 20, 1906. The acreage devoted to corn is 88,617 acres less than in 1905.

Reports gathered from various parts of Canada give the general opinion to be for a good crop. Premier Roblin, of Manitoba, forecasts the wheat crop for the three western provinces, not including Ontario, to be 125,000,000 bushels. Other estimates are as low as 95,000,000 bushels.

The State Agricultural Bureau estimates Tennessee's corn crop this year at 100,000,000 bushels, against 77,000,000 bushels last year. The average condition this year is reported as 11 points above the average of the past two years, and the acreage is greater than in any previous year.

Indiana expects as large a corn crop this year as last, the drouth having been broken just in the nick of time. The rains have also made early fall plowing possible. This will likely result in a larger acreage for next year, a tendency which is being encouraged by the generally large yield of wheat per acre this season.

The corn condition in Michigan is six per cent better this month than last and eight per cent better than a year ago. The wheat crop is considerable lighter than a year ago and the yield is a bushel less than in August. Oats also yield less than in August and the quality is inferior. This crop is very much below the average.

A Chicago grain expert, just returned from a 1,000-mile trip through the Northwest, says there are no Sundays in that section this year, as men, women and children are working to secure the big crop of wheat, oats and flax, which with good weather, should have been safe September 15. He says there are large crops of oats and corn.

The wheat crop of the Northwestern states for 1906 is estimated by the Duluth Commercial Record at 210,000,000 bushels, of which probably 22,000,000 bushels will be required for seeding next spring, leaving 188,000,000 bushels available for terminal markets and interior mills. The durum wheat crop is estimated at 40,000,000 bushels. In comparison, H. V. Jones, the Minneapolis expert, predicts a yield of 230,000,000 bushels.

Secretary F. D. Coburn, of the Kansas State Board of Agriculture, recently issued a statement setting forth that his state leads all others by far in the production of winter wheat. He claims the crop is well toward twice that of her closest competitors, which this year are Nebraska and Indiana, and more than twice that of Illinois and Ohio. The government rates Missouri, Oklahoma, California and Michigan among the crack winter wheat states,

but Secretary Coburn says Kansas has more than these four states combined. There appears at least 10,000,000 bushels more wheat than was estimated in June. According to the same authority the corn crop is exceedingly promising and there will be a sure yield of great bulk.

A paper at Omaha, Neb., says: "Reports from correspondents throughout the state indicate that Nebraska's corn crop this year will reach 275,000,000 bushels, against slightly over 260,000,000 bushels last year. The increase in acreage of wheat, corn and oats over last year is 500,792 acres, of which 368,419 acres are in corn." Crops in that state were favored by a hot spell of a week, when the temperature ranged between 95 and 100 degrees.

The Crop Reporting Board of the Bureau of Statistics of the Department of Agriculture finds, from the reports of the correspondents and agents of the bureau, the condition of corn on September 1 was 90.2, as compared with 88.1 last month, 89.5 on September 1, 1905, and a ten-year average of 81.0. The following table shows for each of the states having one million acres or upward in corn the condition on September 1 in each of the last two years, with the ten-year September averages:

States.	Sept. 1, 1906.	Sept. 1, 1905.	Ten-year average.
Illinois	88	96	85
Iowa	95	89	83
Nebraska	87	95	81
Kansas	86	88	70
Texas	77	79	71
Missouri	87	98	80
Indiana	95	99	88
Georgia	91	86	84
Kentucky	100	95	84
Tennessee	97	84	81
Ohio	99	90	85
Alabama	93	84	82
North Carolina	85	83	85
Arkansas	97	81	77
Mississippi	92	74	78
Indian Territory	95	96	90
Oklahoma	95	83	70
South Carolina	84	74	79
Virginia	91	97	89
South Dakota	91	91	86
Minnesota	92	90	86
Wisconsin	95	91	87
Pennsylvania	96	96	88
Louisiana	85	71	81
Michigan	93	85	84
United States	90.2	89.5	81.0

The average condition of spring wheat when harvested was 83.4. This is the third year that spring wheat has been separately reported upon on September 1; comparison is, therefore, made with the condition one month ago, which was 86.9, and with that reported September 1, 1905, which was 87.3. The condition in the five principal states is reported as follows: Minnesota 79, North Dakota 84, South Dakota 88, Iowa 93 and Washington 75. The average condition of the oat crop when harvested was 81.9, against 82.8 last month, 90.3 reported September 1, 1905, and a ten-year average of 81.9. The following table shows for each of the eleven principal oat states the condition when harvested, as reported on September 1, in each of the last three years, and with the ten-year averages:

States.	Sept. 1, 1906.	Sept. 1, 1905.	Ten-year average.
Iowa	88	94	80
Illinois	72	89	82
Wisconsin	92	95	88
Minnesota	87	95	87
Nebraska	79	86	76
Indiana	69	96	87
New York	88	93	89
North Dakota	91	96	82
Pennsylvania	78	92	85
Ohio	75	87	89
Michigan	76	92	88
United States	81.9	90.3	81.9

The average condition of barley when harvested was 89.4, against 90.3 on August 1, 1906, 87.8 reported September 1, 1905, and a ten-year average of 83.7. The average condition of rye when harvested was 90.5, against 90.8 reported September 1, 1905, and a ten-year average of 86.5.

The Hungarian Minister of Agriculture issued his annual estimates of the world's crops, showing the total yields in meter centners to be: Wheat, 949,000,000, as compared with 926,000,000 last year. Rye, 382,000,000, compared with 394,000,000. Barley, 315,000,000, compared with 307,000,000. Oats, 527,000,000, compared with 534,000,000. Maize, 987,000,000, compared with 917,000,000. The Minister estimates the world's total requirements of all grains at 3,131,000,000 meter centners, so that, with the

supplies remaining from previous crops, amounting to 91,000,000 meter centners, he estimates that the surplus of all grains for 1906-07 will be in the neighborhood of 120,000,000 meter centners.

Arkansas has gone wild over the prospect of a corn crop, which is estimated by the Pine Bluffs Commercial, from a summary of its correspondents, at no less than 75 per cent increase over that of 1905. Dr. Robinson expects to harvest 7,500 bushels from a field of 100 acres, east of Little Rock. Col. Abner McGehee of McGehee, estimates the increase to be anywhere from 250 per cent to 500 per cent over 1905 and from 100 to 250 per cent over that of any year since the war.

## TRANSPORTATION FROM THE CANADIAN WEST.

In a report recently issued by the Royal Commission in Transportation of Canada, it is said:

"The whole of the grain of western Canada which is shipped eastward is at the present time, tributary to the lines of the Canadian Pacific or to the Canadian Northern Railway companies, and is carried by their cars from the point of original shipment to Port Arthur or Fort William for lake transport. In ordinary seasons practically no grain intended for export is carried all-rail from these ports to the seaboard, excepting what little is required, in winter season, to complete the loading by the Canadian Pacific Railway Company of their boats at St. John.

"The following table shows the number of shipping stations, also the number of elevators and warehouses, with the total storage capacity, west of Lake Superior, including Fort William and Port Arthur, for the years 1900 to 1904-5:

No. of Elevators	Year.	and Warehouses.	Capacity.
1900	533	.....	18,879,353
1901	653	.....	29,000,000
1902	832	.....	30,356,400
1903	982	.....	41,000,186
1904-5	1026	.....	46,918,030

"Of the above mentioned storage capacity for 1904-5, 28,456,030 was at interior points and 18,462,000 at Fort William and Port Arthur.

"The elevators and warehouses in the interior cover nearly 400 shipping points, and are practically all owned by private persons. Some of the elevators are known as farmers' elevators, being owned and operated by associations of farmers who became incorporated for that purpose, but the elevators, by whomsoever owned, are, by the provisions of the grain act, public elevators, and must take grain for storage from any person who offers it, provided there is sufficient room for such grain in the elevator. In 1901 the number of farmers' elevators was twenty-nine, with a capacity of 870,000 bushels. On January 1, 1905, the number was twenty-four, with a total capacity of 1,320,000 bushels.

"Instead of selling his grain at points of shipments, or putting it through an elevator for his own account, the farmer may, if he sees fit, apply to the railway agent for a car or cars, and on being allotted such, may load direct from his wagon into a car and send it forward for sale on track at Fort William or Port Arthur, or for storage at either of the latter points on his own account, subject to his own order at any time thereafter. The law requiring the railway companies to furnish cars for private shipments, so that grain can be loaded directly on the cars, has been of great benefit to individual shippers. The commission is pleased to note that an officer has recently been appointed by the government to look after the interests of farmers who ship grain direct by loading cars or through an elevator.

"Your commission would suggest, as an improvement are completed, there will be for the present, that provision be made whereby the warehouse commissioner be empowered, in his discretion, to compel the railway companies to provide agents during the grain season at such shipping points where ordinarily there is no agent, as he may deem advisable.

"From Winnipeg to the commencement of the water transportation system at Port Arthur and Fort William, the distance is 427 miles. The present existing railways will shortly be reinforced by the Grand Trunk Pacific Railway, and the transportation facilities further improved by the double-tracking of that portion of the Canadian Pacific Railway lying between Winnipeg and Fort William, which is now under contract. When these improvements are completed, there will be for the present sufficient means for transportation of the products of the West seeking ports, provided the railway companies supply sufficient equipment in the way of engines and cars and extend their branch lines within the grain districts to meet the requirements of producers in such districts."



## PERSONAL

Tom Conner of Ayr, N. D., is buyer at the new Cargill Elevator.

Frank Peifer is in charge of the Quinn Elevator at Litchfield, Minn.

Peter Karpen, a grain man of Summit, S. D., is now at Medina, N. D.

E. J. Matteson of Adrian, Minn., is now in charge of an elevator at Athol.

John B. Peterson is manager of the M. & N. Elevator at Erskine, Minn.

L. C. Hagen is now in charge of the Cargill Elevator at Murdock, Minn.

Hosias Hindraker will buy grain for the Western Elevator at Astoria, S. D.

W. J. Baker of Mt. Vernon, S. D., will buy grain for the Reliance Elevator.

F. H. Horne is to have charge of the Homestead Elevator at Almora, Minn.

James T. Blacklock is now in charge of the State Elevator at Walhalla, N. D.

A Mr. Runa is buying wheat for the Kilbernil Elevator at Monango, N. D.

A Mr. Crowley will have charge of the Skewis Elevator at Madelia, Minn.

Sever Pritz of Cooperstown, N. D., is in charge of an elevator at Devil's Lake.

E. A. Dahlen will buy for the Osborn-McMillan Elevator at Barsness, Minn.

Hans Frederickson is buying grain for the elevator at Granite Falls, Minn.

M. J. Smith has resigned as agent for the Duluth Elevator Co. at Darwin, Minn.

Will Carsten of Gary, S. D., has taken charge of the new elevator at Burr, S. D.

John Daiker of Perham, Minn., has taken charge of the elevator at Clear Lake.

Tom Egan of Benson, Minn., will buy grain for an elevator near Rugby, N. D.

George Thompson of Mottville, N. D., is manager of the new elevator at Fairdale.

A. T. Garson of Wilmot, S. D., is now the buyer for Lindquist Bros. of Ortonville.

George Walsh of Benson, Minn., has resigned as manager of the Gillette Elevator.

Fred J. Johnson is the new grain buyer for the Empire Elevator at Britton, S. D.

K. A. McRae of Howard, S. D., is in charge of the Lyons Elevator at Gunthorp, N. D.

Lars Odegaard of Emmons, Minn., now has entire charge of the Harper Elevator.

Harold Bolstad has resigned as manager of the Imperial Elevator at Walcott, N. D.

H. R. Baker has left Hayfield to take charge of the State Elevator at Felton, Minn.

Ole Lillervee is manager of the St. Anthony & Dakota Elevator at McIntosh, Minn.

Louis Nelson is now grain buyer for the Rothschilds Elevator Co. at Trosky, Minn.

D. V. Downs has become the agent for the Duluth Elevator Co. at Kandiyohi, Minn.

H. A. Miller, of Waubay, will have charge of the Independent Elevator in Eureka, S. D.

M. J. Garry of Blue Earth, Minn., will buy grain for the Peavey Elevator Co. at Avoca.

T. J. Tradewell of Fairfax, Minn., is now in charge of the Pacific Elevator at Echo, Minn.

James Ployhart has been engaged to buy wheat at the Sugden Elevator of Olivia, Minn.

Jack Wisecarver is manager for the Updike Grain Co.'s elevator at Red Cloud, Minn.

Peter Knudson of Northwood, N. D., will take charge of the elevator at Eckelson, N. D.

George Cahill of Reedsville, Wis., has assumed charge of the grain elevator at Collins, Wis.

Hans Miller has resigned the management of Bingham Bros.' Elevator at Wabasso, Minn.

Bud Smith of Verdon, S. D., has leased his farm and assumed charge of the Eagle Elevator.

Edward Olson of Jackson, Minn., will buy grain for the W. W. Cargill Elevator Co. at Airlie.

P. A. Teslo of Jasper, Minn., is the new agent for the Imperial Elevator at Bottineau, N. D.

William Ryan of Benson, Minn., will buy grain for the Northwestern Elevator Co. in Dakota.

Frank Chard, for several years in charge of the Benson Grain Co.'s Elevator at Woodstock, Minn., has resigned in favor of Walter Warren, and has

accepted a position with W. D. Parker in his Hatfield Elevator.

Hokan Larson of Hector will buy grain for the Crown Elevator Co., at Sacred Heart, Minn.

Hockin Ellison is the manager of the new St. Anthony & Dakota Elevator at Hoople, N. D.

A Mr. Day, of Hutchinson, is buyer for the Northwestern Elevator Co.'s plant at Benson, Minn.

Joe Bryan has succeeded Ole Stangeland as manager of the Western Elevator at Hetland, S. D.

William Schueller of Howard, S. D., is grain buyer for the Bennett Grain Co. at Fulda, Minn.

A Mr. Whiteford is the new buyer for the Marshall Milling Co.'s elevator at Clear Lake, S. D.

Herman Eilts, former owner of an elevator at Danforth, Ill., has moved his family to Kankakee.

Ralph Rhode of Cherokee will manage the grain business at Larrabee, Iowa, for Weart & Lysaght.

A. M. Klein of Washburne, N. D., is in charge of the Washburne Grain & Feed Co.'s Elevator at Wilton.

Herbert Haight of Willow Lakes is the new grain buyer for Stoddard & Ketchum at Erwin, S. D.

Everett Rowe of Ludden, N. D., has gone to Belle Plaine to buy grain for the Northwestern Elevator Co.

Joe Lorsung of Brandon, Minn., has succeeded Peter Hoplin as wheat grader at the Interstate Elevator.

John Thompson of Cyrus, Minn., will have charge of an elevator at Souris, N. D., for a Minneapolis firm.

Daniel McFaul of Letcher, S. D., is manager of the St. Anthony & Dakota Elevator at Considine, N. D.

Louis Norman of Kandiyohi, Minn., takes charge of the St. Anthony & Dakota Elevator at Langdon, N. D.

G. S. Bendon is manager for the New Grain Co., of Portsmouth, Iowa, which is using the Atlas Elevator.

J. J. Lindquist of Kandiyohi, Minn., will run the elevator for the Duluth Elevator Co. at Johnson, Minn.

Edward Stevens of Wallingford, Iowa, has left the elevator there to buy grain for Stockdale & Dietz.

Charles Chavet is buyer at the Bagley Elevator of Twin Brooks, S. D., which was recently reopened.

J. Fredlund of Ulen, Minn., has gone to Hatton, N. D., as grain buyer for the Great Western Elevator Co.

Sam Even of Ward, S. D., has been employed to buy grain at Cresson for the E. A. Brown Elevator Co.

Henry Bergman of Norwood, Minn., has charge of the elevator in Young America, which will be reopened.

Frank P. Wernli of Le Mars, Iowa, will buy grain for the Van Dusen-Harrington Company at Max Bass, N. D.

A. Fredenburg of Browerville, Minn., takes charge of an elevator owned by Winter & Ames at Kempton, N. D.

Herbert Johnson of Toronto, S. D., will take charge of the Lyon Elevator Co.'s plant at Turtle Lake, N. D.

William Blackman, of Springfield, is the new grain buyer for the Western Elevator Co. at Sanborn, Minn.

Lester Kranhold of Groton, S. D., has accepted a position as buyer for the Bagley Elevator at James, S. D.

Norman Beaton of Mallock, Minn., has been given the position as buyer for the Duluth Elevator Co. at Northcote.

Mark Plowman of Cleveland, N. D., has been secured as buyer for the Occidental Elevator Co., at Melville, N. D.

B. H. Bertelson of Lake Preston, S. D., is now the grain buyer for the W. W. Cargill Elevator Co. at Erwin, S. D.

I. W. Wills, who has been with the line people at Pomeroy, Iowa, for many years, is now in charge of the Farmers' Elevator.

John Olson has resigned his position at Campbell, Minn., and is now buyer at the Blouin Elevator of Lamere, N. D.

M. D. Kavanaugh has resigned as agent for the Duluth Elevator Co. at Crary, N. D., and is succeeded by C. J. Kalinowski.

Gus Meine has resigned from the grain department of the Sleepy Eye (Minn.) Mills to become superintendent of an elevator company on the Soo

and Great Northern roads in North Dakota. He will make his headquarters at Minot or Kenmore.

D. Halliday of Cavalier, N. D., has been given charge of McCabe Bros.' elevator at Hensel, N. D.

Scott Taylor of Kasota, Minn., has resigned as millwright at the Hubbard & Palmer Elevator and will go to the Pacific coast.

Archie Thomas succeeds William Thomas as buyer for the Horton Elevator at Marion, Minn. The latter goes to Stewartville.

S. I. Miller of Odessa, Minn., has been appointed traveling auditor for the Bagley Elevator Co., and will operate along the Soo line.

E. E. Swan of Stewart, Minn., has been engaged as buyer at the Monarch Elevator to take the place left vacant by Edward Reinhardt.

Earl Hoagland of Marshall, S. D., has been given charge of The Marshall Milling Co.'s Elevator at Gary S. D., in place of Will Carsten.

Samuel Steensen of Finley, N. D., has resigned his position at the north elevator and William Bate-man has been appointed to his place.

A. J. Kaufman of Blue Earth, Minn., succeeded W. H. Davis as manager of the Everett, Aughenbaugh & Co. Elevator at New Richland, Minn.

Peter Moritz of Melrose, Minn., took possession of the Interstate Elevator as grain buyer, a position before held by Joseph Primus.

Guy Chapman of Ashkum is the new manager for the Eilts Elevator at Danforth, Ill., recently purchased by the R. F. Cummings Grain Co.

John McKellar of Herron Lake, Minn., has accepted a position with the St. John Grain Co. at Starden, Minn., where he will be the buyer.

W. E. Bell is the new agent for the Federal Elevator Co. at Hillsboro, N. D.. He was with the same company for several years at Hereford, Minn.

Peter Schumacker will be retained as inspector at the Prairie Elevator in Dent, Minn., which recently was purchased by the Homestead Elevator Co.

Mr. Bitterman of Parkston is the new buyer at the Hunting Elevator of Delmont, S. D., in place of John Holton, who recently moved to North Dakota.

Edward Rorvig of McHenry, N. D., has severed his connection with the H. S. Halvorson Co. to assume charge of an elevator for the Monarch Elevator Co.

James D. Smith has succeeded Val C. Meyer as agent for the Monarch Elevator Co. at Dumont, Minn. The latter has accepted a position at Mandan, N. D.

C. A. Lehman has been appointed grain buyer for the Iowa-Minnesota Cereal Co. at Truman, Minn., to fill the vacancy made by George Smith's resignation.

John Kamps, grain buyer at No. 2 Elevator of Sisseton, S. D., for several years, has become buyer for the Sullivan Lumber Co. at their new elevator in Balfour, N. D.

A Mr. Enright of Osakis has been given charge of the Rothsay Elevator Co.'s elevator at Rothsay, Minn., which is being operated by the Tillotson Milling Co. of St. Cloud.

William O'Loughlin, who has had charge of the Atlantic Elevator at Fullerton, N. D., for the past two years, will engage in the grain business for himself at Sterling, N. D.

J. M. Johnson of Murdock, Minn., has resigned as manager of the Northwestern Elevator in favor of Andrew Engberg, and will buy grain for the same company at Climax.

John Stutelburg of Clara City, Minn., has been transferred from the management of the St. Anthony & Dakota Elevator Co.'s plant to their new elevator at Berthold, N. D.

Victor Lund, who for a year and a half past has been buyer at the Great Western Elevator at Lafayette, Minn., has resigned. Anton Malmberg of Bernadotte is the new buyer.

A. R. Thompson, who for some time was agent for the Minnesota and Western Grain Co. at Crary, N. D., has gone to Ypsilanti, N. D., to become general manager for a line of elevators.

A. J. Murray of Aberdeen, S. D., has resigned the management of the Bagley Elevator in favor of Edward Wilber. Mr. Murray has been appointed manager of the Farmers' Elevator Co.

A. E. Johnson from Tyler, Minn., is the new buyer at the National Elevator of White Rock, S. D., taking the place of J. B. Zimmer, who recently resigned to accept a similar position in Canada.

N. E. Norman, who has had charge of one of the elevators at Langdon, N. D., has accepted a similar position at Norwood. His place will be taken by his brother, Lewis, who was agent at Langdon.



The elevator at Ayson, N. D., will be in charge of a Mr. Mickelson of Stephen, Minn.

Charles W. Cullen of Waverly, Minn., has charge of the Hennepin Elevator Co.'s plant at Downer, Minn.

Gus Wilcox has been succeeded as buyer for the Atlas Elevator Co. of Aurora, S. D., by Frank Ripley.

Jonas W. Holmes takes charge of the Bosch Grain Co.'s warehouse at Cannon Falls, Minn., about the middle of September.

Alex Arnold of Vesta, Minn., has gone to Berwick, N. D., to become associated with his brothers, Herbert and Henry Arnold, in the grain business.

John Mahoney, who has been manager of the local branch of the National Elevator Co., of Maxbass, N. D., since its establishment, has resigned his position and contemplates accepting a more lucrative one at Russell.

Vincent Cornwall has been appointed agent for the Occident Elevator Co. at Eldridge, N. D., succeeding his father, who has been the chief grain buyer in that section of the country for the past quarter of a century.

The National Elevator Co. of Christine, N. D., has opened for business with P. A. Hoyem as buyer. F. S. Monson, who has been in charge of the elevator for fifteen years, has gone to Carbury, N. D., to take charge of an elevator.

B. L. Beaton of Crookston, Minn., has been promoted from local manager of the Duluth Elevator Co. to succeed General Superintendent Neeland of the company's line. Mr. Neeland has been given charge of the Peavey Elevators in Canada.

## BARLEY AND MALT

The Gate City Malt Co., of Omaha, Neb., will erect a new plant.

A recent incorporation is the National Malting Co., of Chicago, Ill., which is capitalized for \$15,000.

Gregor Weimbeer of Nuremberg, Germany, has been granted United States letters patent No. 829,307, on an apparatus for turning green malt.

C. T. Bosch, a well-known maltster and barley merchant of Davenport, Iowa, on August 29, paid \$5,000, the record price for membership in the Minneapolis Chamber of Commerce.

Reports from Pullman, Wash., state that Patrick Ryan secured an average of 45 bushels of barley to the acre from his 800-acre field, and Fred Hickman has a similar average.

Reports summarized by a Winnipeg, Man., paper show a most glowing condition of the barley crop in that section of Canada. Harvest commenced about the 15th of August.

The Great Western Elevator Co. of Nome, N. D., shipped a car of new barley Tuesday, August 21. This is perhaps the first car of new grain shipped from Barnes County this season. It graded No. 3.

The first threshing of this season's crop in Townier County, N. D., was done on the McLaughlin farm, near Cando. From 140 acres of barley over 5,600 bushels of grain were threshed, testing 48 pounds to the bushel at the elevator.

In a recent deal the American Malting Company of Chicago, Ill., disposed of the J. I. Aaron plant and a 400,000-bushel grain elevator to the Rothchild Grain Co., of Davenport, Iowa. The purchase also includes a malt house of the same capacity equipped with the Salladin system for pneumatic malting. It is said the consideration approximates \$100,000.

P. H. Rice of the Rice Malt & Grain Co., of Chicago, Ill., was recently before the Dubuque Commercial Club of Dubuque, Iowa, with a proposition to raise \$100,000 by popular subscription for the erection of a malting establishment with an annual capacity of 1,200,000 bushels. Mr. Rice and his son, W. P. Rice, a graduate of the Massachusetts School of Technology, control the latter's patents for converting barley into malt. The process, it is stated, saves 90 per cent in labor and 50 per cent in fuel by comparison with old methods, while economy in construction is such that \$100,000 will produce the equal of an \$800,000 plant constructed under the old methods.

### THE BARLEY CROP.

The annual "Special Barley Report" of a Western Brewer for 1906 was published on August 15. Among other things it says:

"At the beginning of the cutting of the barley crop in the Northwest every indication pointed

to an exceptionally large crop of bright barley, but after the 26th and 27th of July copious rains fell over nearly all the barley districts of Iowa, Wisconsin and Minnesota, which caused a very large portion of the crop remaining exposed to the inclemency of the weather to become discolored; hence the barley, instead of being generally of a bright color, will be largely spotted. Of late years the meteorological conditions of the three principal barley raising states of the West, viz., Iowa, Wisconsin and Minnesota, have diminished to more or less of a degree the chances of those states raising bright barley as of yore; therefore, most of the bright barley will have to come from the two Dakotas, where rains and heavy dews are not as frequent during the harvesting of the crop as they are in the states lying south of them. This year, however, Wisconsin has more bright barley than for the last few years.

"From the tabulated reports we arrive at the following conclusions:

"Last year's acreage in the four principal barley producing states of Iowa, Minnesota, Wisconsin and Dakota was 2,348,196 acres. This year's estimated acreage in the same states is 2,207,305 acres, or about 6 per cent less.

"The average yield being 31 bushels to the acre, the total yield in the four above named states would be 68,426,455 bushels, as against last year's yield of 65,378,909 bushels, or larger by 3,047,546 bushels.

"Thus the result in the United States may be summed up as follows: Estimated yield in Iowa, Minnesota, Wisconsin and South Dakota, 68,426,455 bushels; North Dakota, estimated, 19,326,244; Pacific states, estimated, 39,000,000; Nebraska, Kansas, Michigan, Indiana and Illinois, 7,286,000; New York, 2,500,000; Ohio and some southern barley producing states, 2,600,000; grand total, to the front of barley states; its last year's acreage, 139,138,699 bushels, or 140,000,000 in round numbers, as against last year's total of 136,651,020 bushels, making this year's crop larger by 2,487,679 bushels.

"It would be almost superfluous for us to add that this year's barley crop is superior to last year's for malting purposes. The general quality and color being of a higher grade than last year's barley, when the bulk, you might say, consisted of feed barley which our malsters and brewers were compelled to use, which, under any other circumstances such as this year's crop presents, they would not touch.

"We never venture in predicting prices, and more especially not this year, when, as we are informed, the crop of oats is larger and the corn crop most promising; nevertheless the barley crop, being of a superior quality, will be remunerative to the producers as well as to the manufacturers of malt and beer."

### GRADING CANADIAN GRAIN.

The agricultural committee of the Canadian House of Commons has had before it the demands of the western wheat growers for a modification of the grading rules for wheat in the way of a relaxation of the requirements placed upon the grain to meet the grades.

Hon. Thos. Greenway, who championed the cause of the farmers, accepted the amendments as a temporary measure of relief, and asked for further amendments in the near future. The proposal to appoint a grain commission for the purpose of finding a solution of many problems in connection with the handling and grading of the produce of the wheat fields of the West was commended. The request of Alberta and Saskatchewan for a distinctive grading for winter wheat was acceded to, and in future "Alberta red winter" will be a standard grade in the markets of the world.

Hon. Mr. Fisher explained that the committee had given a good deal of attention to grain problems, and had decided that a commission should be named to report upon the whole grain question. That commission, he said, would be named and would begin work immediately. An item in the estimates provided for its expenses. There were some points in which the committee found a unanimity of opinion. These had been embodied in the bill before the House. It compelled a weighmaster to give a certificate of the weight of each car weighed by him, and that certificate would be prima facie evidence. The word "plump" is dropped from No. 1 Manitoba hard. The extra No. 1 hard grade was mixed out, as no grain of that grade had been offered for many years. As Alberta had started to produce a hard winter wheat, and the old act only provided a grade for Ontario winter wheat, which was soft, the new bill defined grades for new Alberta winter wheat. No. 1 Alberta red winter is to be sound, plump and clean and weigh not less than 62 pounds to the bushel. No. 2 is to weigh not less than 60

pounds, and No. 3 not clean or sound enough to grade No. 2 and weighing not less than 57 pounds a bushel.

## TRANSPORTATION

The rate named by the Illinois Central Railroad Co. on corn and oats for export, 10 cents per hundred to New Orleans, went into effect September 1 and will cover Peotone and stations south of La Salle, Ill.

The gulf lines announced a new tariff on export grain beginning September 1 from Missouri River points to gulf ports, to meet the reduction declared by the Wabash from Missouri river points to the Atlantic Seaboard.

Eastern roads have served notice on the grain trade to load all cars to a specified minimum quantity. The roads assert that the failure to load cars to their full capacity is responsible for a good share of the present car shortage.

The Spring Lake Packet Company has been organized in Pekin, Ill., to transport grain from Spring Lake and points along the Illinois River. The stockholders are J. C. Aydelot, H. W. Hippen, Otto H. Unland and John Block.

Traffic officials of the various railroads centering in Chicago believe that grain traffic this year will be 20 per cent in excess of that of last year. Taking the country as a whole, a one-fifth increase is believed to cover the case pretty correctly.

Roads east of Buffalo announced a further advance in rates at and east of Buffalo of ½ cent, effective October 8. This rate, which would put the wheat rate to 5½ cents per bushel between Buffalo and New York, the highest figure recorded in recent years, was later rescinded.

The Great Northern, the Northern Pacific and the Soo Roads made a reduction of 10 per cent on the freight rate on grain to take effect September 1. The rate applies only to the state of Minnesota. It is estimated that the lower rates will mean a saving of from \$1,000,000 to \$1,500,000 in this year's crop.

When the new state of Oklahoma is admitted to the Union, late next May, it is estimated it will have 6,000 miles of railway in operation. It has 3,000 miles now and 3,000 miles more are expected to be completed by June 1, 1907. It is thought no state ever came into the Union with such extensive transportation facilities.

At the conference of the traffic officials of eastern and western railroads, held recently in Chicago, it was decided to remove the "plus 2 cent" rate on grain coming into Chicago from points in central Illinois. It is claimed by grain men that the removal of the 2-cent addition will mean the direct shipment of grain from points in the central states to the East, thus cutting out Chicago.

In order to secure sufficient freight with which to load his Oriental liners, the Minnesota and Dakota, J. J. Hill threatened in August to cut the rate for wheat from the Pacific Coast to Hongkong to \$4 per ton instead of maintaining it at \$4.50, which is charged by all of the other steamship companies. If a rate war ensues exporters will be in a position to send grain to the Far East more cheaply than for a number of years.

On September 1 the Missouri Pacific Railroad published a rate on grain to West Wego, Galveston and Texas City from Omaha of 17½ cents on wheat and 16¼ cents on coarse grains and a rate of 1 cent less from Kansas City to those points. This was a cut of 1 cent to maintain the agreed differential between the Atlantic and gulf rates, the Wabash having announced a 1-cent reduction in the rate to the Atlantic Seaboard.

The Wabash & Toledo, St. Louis & Western roads have made an open rate of 6½ cents on grain from St. Louis to Cleveland, against the regular rate of 11½ cents, quoted by the other lines. The larger railroads, rather than tie themselves up with low rates, which under the new Hepburn law, cannot be changed without long and formal notice, have decided to disregard the competition and let the smaller roads carry as much of the low-rate business as they can get.

The rice fields of Texas are calling for harvest hands, who are very scarce.

Gilbert Nelson, wheat buyer for the Northwestern Elevator Co., Wolcott, N. D., is reported missing. Nelson left Wolcott on August 16, and had a railroad ticket for Browns Valley, but never reached there, and no trace of him can be found. The elevator company reports his accounts straight.



## COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

### May Deliver to Consignee Without Production of Bill of Lading.

The Supreme Court of Texas takes a different view of the law on this point from that of the Court of Civil Appeals of that state. It says (Nashville, Chattanooga & St. Louis Railway Co. vs. Grayson County National Bank, 93 Southwestern Reporter, 431) that it thinks the carrier would clearly have the right to demand the bill of lading before delivering to the consignee, provided it had any good reason to doubt the consignee's right to receive the goods. But while it has been held that if the parties to a bill of lading stipulate that the goods shall not be delivered without its production, the carrier is not excused for a delivery to the consignee when the bill is not presented, yet this court understands the law to be that, in the absence of such a stipulation, the carrier may deliver without requiring its production. This court has found an expression in the opinions of some of the courts to the effect that if a delivery be made in the absence of the bill of lading, the carrier takes the risk; but this court apprehends that it is merely meant that he takes the risk of the bill being such as authorizes a delivery to the person to whom he may deliver. It is laid down as elementary law that the consignee is presumably the owner of the goods. He is entitled to demand a delivery of them, subject only to the right of stoppage in transitu, and, therefore, the carrier may safely deliver them to him, provided always the latter has no notice of a limitation upon the right in favor of an adverse claimant.

### Liability for Damage to Corn Not Reported to Carrier as Required.

A car load of corn shipped from Kansas City to New Iberia, La., consigned to shippers' orders, notifying a certain firm, reached destination March 11, and the firm said as soon as they had room in their warehouse they would take it, but on March 25 notified the agent there that they had refused to accept it. The corn was then apparently in a worthless condition. The shippers sued the railway company. But the Kansas City Court of Appeals holds (Freeman vs. Kansas City Southern Railway Co., 93 Southwestern Reporter, 302) that the company was protected by a provision in the contract of affreightment that all claims for loss and damage should be made in writing within five days of the arrival of the freight at destination, and that failure to give such notice should be deemed a waiver of any claim for loss or damage.

The right of the carrier to receive notice, as stipulated, the court says, will be enforced when necessary to prevent possible imposition in the particular case, but it will not be unreasonably nor harshly applied to deprive the shipper of his lawful rights, nor will it be enforced at all when its purpose has been fully and unequivocally accomplished. But from the facts in this case the court does not think the shippers had excused themselves for their failure to give the notice, even under the liberal doctrine just stated. Their argument that they moved with all reasonable expedition to acquaint themselves and advise the railway company of the nature and extent of the damage when they learned that they had been damaged did not fill the measure of their own duty.

Sending corn at this season into a warmer climate, under the weather conditions then prevailing, the shippers knew subjected it to risk of being injured, even when carried with due care; yet they negligently failed to provide for its prompt reception when it arrived at destination. As consignees, it was their duty to be on hand ready to receive it. So far as the relations between the shippers and the railway company was concerned, the vendees at New Iberia might properly be treated as the agents of the shippers to receive the corn. They permitted it to remain sealed in the car for two weeks without inspection. How can any reasonable person say how much damage the corn received from the injurious processes that must have been in operation during that period? If this fact cannot be known, neither can any tell the extent of the damage that had accrued when the car reached its destination. The facts of this case pointedly exemplify the wisdom of the rule that sustains a regulation of the character above stat-

ed. With the corn sealed in the car and concealed from view, the railway company did not and should not be expected to know its condition on arrival. It had no opportunity to investigate and protect itself; while, on the other hand, the shippers who were constructively present in the persons of their agents, the consignees, had the means of immediately informing themselves of the condition of the corn and negligently failed to use them.

Moreover, the court says that there was no merit in the contention that this regulation was without consideration to support it. Nor were there any facts in proof from which it fairly might be inferred that the railway company waived compliance with the provision.

## IN THE COURTS

The action of the Farmers' Elevator Co against J. G. Gunderson and M. E. Sperry at Grand Forks, S. D., was dismissed on August 29, it being found that a charge that the defendants were short in their accounts was false.

The schedule of assets and liabilities which George Booth, receiver of the Elits Elevator at Danforth, Ill., has filed with Walter J. Grant, the referee in bankruptcy at Danville, will show liabilities in the neighborhood of \$65,000, with assets of about \$18,000. Of these assets \$10,000 is from the sale of the elevator and the remainder in book accounts and grain on hand at the time of the failure.

Charles B. Fowler was on August 27 appointed receiver for the Spencer Grain Co. of Minneapolis. The creditors in their petition stated that the Company had transferred its property, including its elevator, to John H. McMillan, aggregating in value \$35,000, and that owing to the fact that certain creditors objected to the transfer, McMillan had made no disposition of the property and refused to do so, desiring to turn it over to a receiver appointed by the court.

### BILL OF LADING PROBLEMS.

In a communication to the New York Journal of Commerce, George H. Hull, Jr., says:

"Permit me to offer a few observations concerning the 'bill of lading question,' which is discussed in your editorial:

"On the surface it would seem, as you say, an easy matter to arrive at a settlement of this much-mooted question by cooperation between the railroads and bankers. On the other hand, a thorough scrutiny of the conditions directly and indirectly affecting this question reveals fundamental complications which present serious obstacles to the accomplishment of the object in view.

"In a complete bill of lading transaction four different parties are concerned and four distinct operations are involved. First, the shipper who delivers goods to the railroad company and receives from it a bill of lading; second, the railroad company which receives goods for transportation and issues to the shipper its bill of lading; third, the banker who discounts the shippers' draft with bill of lading attached, sending it forward for collection from the consignee, and, fourth, the consignee who pays the draft, receives the bill of lading and surrenders it to the railroad company for delivery of the goods at destination. It is the duty of the shipper to deliver the goods to the railroad free from lien or other incumbrance. It is then incumbent upon the railroad to issue to the shipper a negotiable bill of lading, transport the goods and deliver them safely at destination to the party who surrenders to it the bill of lading properly indorsed. It is the banker's function to advance money to the shipper upon his draft secured by the bill of lading as collateral, and to collect from the consignee at destination before relinquishing the bill of lading to him. Each of these separate operations is accompanied by certain specific obligations, and unless each party is held legally responsible for the proper discharge of the obligations pertaining to his particular function the entire operation is thereby crippled.

"Under present conditions financial interests are reluctant to advance money on drafts secured by railroad bills of lading, because the railroad does not issue a bill of lading which gives clear title to the goods. The railroad, on the other hand, is not in a position to create a bill of lading carrying such a title, since the laws of certain states provides that a common carrier, a mortgagee or a bonafide purchaser for value can be deprived of the possession of goods by anyone holding a prior lien upon such goods. Under these conditions the mere fact of possession does not constitute an un-

questionable title to any goods, hence the holder thereof, without tracing the history of each lot of goods, can never know at what moment they may be confiscated; and thus neither the railroad nor the banker can properly perform the services required of them without incurring this unreasonable risk so long as these operate within the states where these absurd laws are in force.

"These laws have become very prevalent in the South, where for many years it was customary for the cotton grower to pledge his prospective crop to the country merchant who advanced supplies to him on credit, and it was for the purpose of protecting such a creditor that laws were enacted giving him the right to follow and attach the hypothecated goods in case the debtor should surreptitiously dispose of them with intent to defraud his creditors.

"It is obvious that the only person (except the borrower) who is in a position to know of any lien upon the goods, and accordingly the only person fitted to protect the integrity of his claim, is the person making the loan; yet certain states have lifted the risk and the sense of responsibility from the shoulders of the party who knowingly and willingly incurs it, and by unloading it broadcast upon the body of their citizens have done an incalculable injury to business by casting a cloud of misapprehension over every transaction that is contemplated within the borders of those states.

The state commissioners appointed for the purpose of promoting uniform state laws throughout the Union have already formulated a law of negotiable instruments which has been adopted by more than thirty states. Through the instrumentality of this commission the American Bankers' Association and the American Warehousemen's Association, in joint conference, have recently devised a law of warehouse receipts, which if adopted will extirpate the statutory obstacles which prohibit the creation of a sound bill of lading. Wherever it is not adopted no amount of cooperation between bankers and railroads can solve the bill of lading question, and hence it behooves the railroads to promote and expedite the adoption of this impending legislation by every state to which their operations extend."

## OBITUARY

Orlando Barsh, a well known hay and grain buyer at Columbia City, Ind., died August 26, after an extended illness.

The death of W. H. Marcy, a well known elevator man of the firm of Marcy & Whitney of Oakwood, Ohio, is reported to have occurred late in August.

Francis M. Cutler, who was for many years a prominent grain dealer at Carthage, Ill., died at his home on August 10, at the age of 51 years. He is survived by a widow, two brothers and a sister.

George Lally, who has had charge of the Minnesota Malting Company's elevator at Rice Station, near Red Wing, Minn., was found dead August 13, in a pasture, where he had gone to milk a cow. He was forty years old and is survived by a family. It is presumed that death was due to heart failure.

Daniel Webster Ranlet, a grain dealer of Boston, Mass., died September 2. He had been in the wholesale grain business in Boston since 1861. He was a member of the Chamber of Commerce and served as vice-president last year. Mr. Ranlet was a member of the Merchants' and Exchange clubs of Boston and was a thirty-second degree Mason.

Daniel Clauser, the earliest resident of Pekin, Ill., with perhaps one exception, died at his home August 20, aged 90 years. He was born in Senberry, Pa., December 8, 1816, and emigrated to Illinois by ox team in 1830. In 1846 he was married and took up his residence in Pekin. For many years he was associated with Reuben Bergstresser & Co. in the grain business. He is survived by seven children. His wife died in 1899.

J. B. Walton, owner and manager of a line of elevators at Champaign, Urbana, Mayview and Thomasboro, operated in partnership with his sons, died at his home in Champaign, Ill., on September 2, after an illness of two months. Mr. Walton was born in Chester County, Pennsylvania, on January 19, 1838. He married Miss Anna Pyle, who, with three sons, is left to mourn, on May 29, 1862. Mr. Walton spent most of his life in his native state on a farm. In 1873, however, he moved to Thomasboro and entered into the grain business, which he followed thereafter. About eleven years ago the family moved to Champaign.



## HAY AND STRAW

A hay market will be opened at Auburn, N. Y.

A new hay market has been opened at Grand Forks, N. D.

Hartel & Martin of Pottsville, Mich., have opened a hay warehouse on the Michigan Central at Charlotte.

J. S. Hall, near Winlock, Wash., has been showing a bunch of timothy seventy-nine inches in height.

It is said that one of the most important crops of the Gallatin Valley (Mont.) is the hay, which is of unusual quality.

The firms of Seger & Manges and Middlewood & Pratz of Waterloo, N. Y., have merged their interests under the title of The Waterloo Hay & Grain Co.

Although the hay crop around Deadwood, S. D., is said to be abundant, that city has suffered a famine, because the farmers have been too busy harvesting to market their hay.

Fred E. Osborne of Unionville, R. I., who has been engaged in the hay and grain business in New York state, will move to Batavia, N. Y., to establish a permanent business.

Dexter B. Cook of Adams, Mass., lost about \$2,000 worth of hay and machinery, in which he deals, when fire destroyed his hay shed at Zylonite, August 20. He will rebuild at once.

An effort is being made to establish a permanent hay market at Crookston, Minn., to handle the product brought in which does not find ready sale. It is proposed to bale and store the hay and if possible ship it.

According to Prof. Frank H. Hall of Aurora, Ill., there are more than 10,000 acres of alfalfa now being grown in Illinois. Estimating that each acre will pay at least \$25 profit, the total amount gained by Illinois farmers this year alone will reach \$250,000.

Wheat that would have yielded from forty to fifty bushels to the acre has been cut for hay in the valley around Ellensburg, Wash. This condition was brought about by the high price for hay, combined with the excessive cost of grain bags. Thirteen dollars a ton has been paid for some new hay.

William J. Overacker, Inc., is the style of a recently chartered hay, straw, grain and produce firm capitalized for \$15,000 at Melrose, N. Y. The incorporators are W. J. Overacker, V. M. Overacker, Melrose; J. K. Overacker, G. D. Bedell, Dumont, N. J.

A complaint has been filed by the Loftus-Hubbard Elevator Co. with the Minnesota Railroad and Warehouse Commission that the several railroads in the state make a much higher minimum charge for weighing than that fixed by the Western Freight Association.

The Delaware & Hudson Railroad arranged with ten farmers along its road to raise small crops of alfalfa this year, and all are reported to have proved successful. It was the purpose of the company to show alfalfa can be made a profitable crop in the Eastern states.

For the second time within a year Shekell Bros., hay dealers of Detroit, Mich., were burned out August 27, at a loss of \$7,000 on stock. Their two-story brick building was completely gutted. It is believed some children playing in the hay were responsible for the fire.

Harry Casady, a capitalist of Boulder, Colo., is financing an alfalfa meal factory to be built at Minot, Colo. It will require 8,000 acres of alfalfa to keep the proposed plant going, for it will operate the year 'round and consume the most of the three crops a year raised in that vicinity.

The Minnesota Railroad and Warehouse Commission has reinstated the system of hay and straw weighing which was suspended August 7. The suspension was made upon the application of various railroads, but George Loftus of the Minneapolis Shippers' Association objected and said that the Commission had no right under the law to suspend the system.

The Minnesota State Railroad and Warehouse Commission have established new rules grading certain kinds of hay. These are graded into three classes, first to be known as mixed hay, No. 1, of the different grasses of good color, properly cured sweet, sound and well baled; No. 2 mixed hay, of the different grasses, not good enough for No. 1, of fair color, sweet, sound and well baled; No. 3 mixed hay, of the different grasses not good

enough for the other grades, sound and well baled.

H. P. McCabe, a hay dealer of Emmet, Mich., has leased a building at Port Huron to use for storing hay and has chartered three cars to run between Emmet and Port Huron for the shipment of hay. In the past he has experienced great difficulty in securing transportation.

Among the new forage plants recently introduced by the United States Department of Agriculture is the Arabian alfalfa, which grows so rapidly as to produce five crops, where the ordinary variety will produce but four. Another is a new variety of timothy which will yield two crops each season.

Based on the returns from 2,000 correspondents, the Ontario Department of Agriculture says in its August crop bulletin, that the hay and clover yield is estimated at 4,862,830 tons, an average of 1.58 ton per acre. This is below the record of last year, but compares well with the crops of the past twenty-five years.

For the year ending with June, 1905, the amount of hay exported was 66,557 tons, valued at \$1,089,505. The imports were 46,214 tons, valued at \$359,515. In 1904 exports amounted to 60,730 tons, valued at \$1,052,705. Imports were 114,388 tons, valued at \$914,842. Excess of imports over exports, 33,335 tons. Export over import value, \$870,853.

The Pennsylvania Warehousing & Safe Deposit Co., of Philadelphia, Pa., will soon erect a new hay shed which will be 240x80 feet, and will accommodate 100 cars. It will be laid with maple flooring and will be entirely enclosed with steel rolling doors, thus assuring plenty of light, so necessary to perfect inspection. Wagons loading at the shed will be protected from storms by an overhanging extension 12 feet wide and 17 feet high.

Freeman Bros. & Co., Chicago, say, September 11.—Timothy: Market rules steady and active in spite of enlarged receipts, for only moderate quantities are being placed on team tracks. We are strongly of the opinion that the large run for the present is either here or in transit and that soon lighter offerings will prevail, and with it a steady and firm market. Barns throughout the city generally are about empty as the high prices of late caused consumers to supply only their immediate wants, and the time is near at hand when normal supplies will be laid in, which will absorb large quantities of hay and by this reason look for good market and prices to continue. All kinds, grades and and qualities will be in demand, though of course top grades will command best prices. Prairie: Arrivals continue small and market rules firm and strong for all kinds. While it is true that the past week has witnessed increased receipts, yet it has been "tame" hay wholly and which has largely originated at nearby points. Kansas, Indian Territory, Oklahoma and Arkansas were free shippers at the beginning of the season, but of late comparatively little has been coming, and choice No. 1 upland continues a scarce commodity and selling readily at outside quotations. The West and Northwest will find here a splendid market for both their wild and tame hay which now is cured and in fit condition for pressing and shipping. Straw: With a market almost bare of arrivals for some time values have firmed up nicely and we can again encourage and even urge you shipping now confident that prompt arrivals will meet an exceptionally good market.

### NEW YORK HAY DEALERS' ASSOCIATION

On August 14, the organization of the New York Hay Dealers' Association was effected at Syracuse and 102 members enrolled. Any hay dealer, receiver or grower of good repute is eligible to membership on payment of the dues of \$1 a year.

F. B. Kenny of Belvidere, was elected president; J. McCreery of Watkins, vice-president C. A. Coleman of Savannah, secretary, and E. D. Dudley of Bath, treasurer. The board of directors is composed of Charles Carscallen, Jersey City; Edward Vreeland, Brooklyn; James Smith of Hosmer, Robinson & Co., Boston; Charles H. Austin, New York; E. G. McCoombs, Rockport; D. N. Bean, Hemlock, and Samuel Dual of Pine Plains.

It is the object of the new organization to protect the interest of the hay dealers and to further the hay industry in the state. An annual meeting will be held the second Tuesday of each August.

No action was taken upon grading hay, but it is presumed that the grades which are used by the New York city trade will prevail. No committees have yet been appointed, but during the course of the year they will be named and other detail work will be outlined.

Indian Territory is beginning to count as a producer of good broom corn.

## SEEDS

The Indiana Seed Co. succeeds the William S. Gilbreath Seed Co., of Indianapolis, Ind.

A three-story addition, to cost \$10,000, will be erected to the plant of the Archer-Daniels Linseed Oil Co., of Minneapolis, Minn.

The H. E. Fiske Seed Co., of Boston, Mass., has been incorporated by P. H. Stratton, H. E. Fiske and D. W. Henry, with a capitalization of \$30,000.

Consul Hoffman Philip at Tangier, Morocco, reports the seed crop outlook to be excellent and considers that country a good source of supply for American seed men.

Rogers Bros.' Seed House at Alpena, Mich., resumed operations September 4, and employed 100 girls and a number of men. The firm is erecting an addition to its building.

The American Warehouse and Trading Co., which is the eastern branch of the Albert Dickinson Seed Co., of Chicago, Ill., recently acquired the Yellow Pine Co.'s property on the Hoboken shore, near Union City, N. J.

The Bartledes Seed Co., of Denver, Colo., and Lawrence, Kan., has been chartered in Oklahoma, with a capital stock of \$300,000. The incorporators are F. W. Bartledes, Max Welhelm, Jeannot Uhrlaub, Lawrence; C. F. Eltzholtz, Oklahoma City.

The recent hot spell assures all the late flax in the Dakotas and though the yield per acre is not so great as last year the acreage is much greater. It is also reported the seed is smaller in size and has the feeling and appearance of being drier than last year.

John W. Hirst has resigned his position of western manager of the American Linseed Oil Company and organized the Hirst & Bagley Linseed Company, which is building a crusher on the north branch of the Chicago River at Chicago. In addition to its regular line the new concern contemplates the manufacture of Chinese nut oil, an entirely new industry in this country.

Indications at present are that at the next session of Congress the congressional free distribution of garden seed will be fought more vigorously than ever. Henry W. Wood of Richmond, Va., president of the American Seed Trade Association, in an open letter to the public, says that this practice is objected to because it is an unjust interference with a legitimate industry and it is a waste of public money. He points out that the government gives away 40,000,000 packets of seeds and the dealers sell 80,000,000.

### SUGGESTIONS TO SEED SHIPPERS.

To inspect seeds properly, one should use the cover of a paste-board box. Put the seed in it, shake it up well, and you'll be surprised how the dirt and light stuff will come to the top and also how much easier it is to see the foreign seeds. Some inspect seed by pouring it into the hand, or wetting a finger and covering it with seed, but both methods are not nearly so good as the "box-cover."

Spending two cents by sending in a sample of seed you have bought may save you dollars. We know this to be a fact. Some shippers have taken in seed, sent us a sample, found it wouldn't grade as well as they expected, not having noticed some foreign seeds; also that they had paid too much, and the result is, when we reported on their sample, they reduced their price to the farmer on the next lot and made a profit. Don't be bashful about sending samples. We are glad to get them and tell you all we know about them.

Some seed shippers send along the seed as fast as they buy it. They don't hold until they get a carload; and many doing this have come out better, even though they paid less than carload rates of freight. Of course, if there's going to be an advancing market, it will pay to hold until you get a carload, but the market is uncertain and shippers must simply take chances. We give a one bag shipment same good attention as a carload, so don't be bashful about shipping small lots.—J. F. Zahm & Co., Red Letter.

### TOLEDO CLOVER SEED TALK.

Toledo is the natural market for the big clover seed states, Indiana and Ohio, which produce more than the other states combined—600,000 bushels in 1905 on a short crop. New York and Pennsylvania are the greatest consumers, and they buy at Toledo and hedge there. Toledo, in fact, is the only market that trades freely in seed futures, as King & Co. tell the trade.

"Clover seed, like wheat, is an international game," says King & Co. Europe takes a hand



in making the price. Germany and the United Kingdom always import freely. Hamburg is the largest market in Europe. Russia occasionally exports considerable and Austria-Hungary some. France varies, but may be an importer this season. Other countries have favorable prospects at present, but September is the important month there. Holland does not market much until December. Chili exports some inferior clover to the United Kingdom. It was not on the seed map a few years ago. Some years ago our country always exported freely and the foreigners dictated the price. Our largest exports were 303,000 bags from the 1893 crop. We exported only 15,000 bags early last season and imported 104,000 bags later, mostly from Canada. The imported seed made the price at the end of the season.

"Start the season right—buy with a profit in sight," says the same authority. There will be no famine. Prices always fluctuate several dollars every season. Prices now are a dollar higher than a year ago. Foreigners say they can ship to Toledo at present prices, but they have not secured their crops.

Crop this year will be very irregular. Acreage is short. Some sections are securing a good yield of Mammoth, better than was expected earlier. Large majority predict a short crop. It is late. Too early to tell definitely about medium, which constitutes most of the crop. Government will give their guess on the acreage and condition in their September report.

## THE PUBLIC ELEVATOR SYSTEM

[From a paper by G. M. P. Pridham of St. Paul, ready at the annual meeting of the American Institute of Bank Clerks, at Minneapolis, 1905. The system described is practically the same in Illinois, Missouri, New York, etc.]

Security for loans is much the same in all parts of the country, speaking broadly; but in any one great district there is likely to be a certain local kind of security more plentiful than in other districts; some great staple, such as cotton in the South, minerals and metals in the mountains, lumber and grain in the Northwest. There are staples and staples. There is one above all others needful to all the people, one of which they must have enough and to spare; that is, wheat. Man can get along without a good many things (and many good things), but wheat he must have.

Therefore, a staple which every man must have is readily turned into cash at almost any time and place. If it is in good order, so much the better. If it is safely stored, where it can be easily reached by fair means, with least possible risk of harm by fire and other dangers, better still. And if guarded also against every possible loophole through which dishonesty might find a way, then we have a perfect security on which to lend money—other people's money; and, to guard that trust, even perfect security is none too good.

How can grain—good security in itself—be made perfect security on which to lend money that belongs to others? There is a process called registration, which has been brought to such perfection that, in all the years in which it has been in use, no dispute has ever arisen over one single receipt—so strict and all-embracing are the rules and means by which these receipts are issued.

The oversight of this system of registration is under the eye of two powerful and able bodies of men—the Minnesota Railroad and Warehouse Commission which appoints all the inspectors and weighmasters; and the Minneapolis Chamber of Commerce [in Illinois by the Illinois Railroad and Warehouse Commission and Chicago Board of Trade; and in some other states by state commissions and exchanges or only by the exchanges] whose objects and purposes are to help buying and selling, to enforce justice and fairness in trade, to settle business disputes, to spread valuable commercial knowledge, and in general to advance its members' interests by their working together. Members of the Chamber of Commerce must be men of the best name and the highest standing in the business world. Membership in this body is therefore a very high guaranty of character; and the loss of it is well-nigh ruin, if not quite so. The officers of such a body are picked men, indeed, and it is with one of these officers—the registrar—that this address has chiefly to do, for upon his faithfulness in his duties depends very largely the great system of elevator receipts, by means of which, as security, such large stores of grain are handled during the crop movement.

The duties of the registrar are, in a few words:

1. To see that the elevator managers furnish daily reports of all grain taken into store or out of store, with advice of all receipts issued or canceled.

2. That the reports of the weighmaster and inspector at each elevator agree with the manager's report, each of these being a check against the other two.

3. Upon the agreement of these reports to register the elevator receipts.

4. To cancel these receipts when the holders wish to take the grain out of store.

5. In general, to see that the record of these receipts is kept perfectly.

A registered receipt means:

1. That grain of a stated kind, amount and grade has been duly inspected, weighed and stored in an elevator. These receipts are very full in detail, giving even the number and initial of the car in which the grain was brought. They are not registered unless the three reports named above agree; and before cancellation, without which the grain cannot be taken out of store, the registrar's books must show that the grain is in store.

What must be done in order to obtain a terminal elevator receipt? You should first hear a short statement of the Chamber of Commerce rules under which elevators must be managed:

1. Their owners must be men of unquestioned financial standing and credit.

2. Elevators must be within easy reach of at least one eastern railway line and all local flour mills, in order to keep down the switching charges to \$3 at most for each car.

3. They must have modern appliances for easy and quick receiving, handling and shipping of grain in bulk.

4. They must report daily to the Chamber of Commerce as aforesaid and also render a weekly sworn statement.

5. They must report any serious loss or damage.

6. Disregard or evasion of rules shall cause an elevator to be declared no longer "regular."

7. Elevators under state warehouse law shall be deemed "regular" if they make the weekly report as above.

8. Owners shall file a bond, well secured, in not less than ten cents a bushel on the capacity of the house.

9. A warehouse receipt shall be issued by the elevator manager to the owner of grain, on proof that railway freight charges have been paid, and that the grain has been inspected and weighed. The receipts shall state the car number and initial, the kind of grain and grade, the amount in bushels, and bear date.

10. Grain must not be taken from store unless the receipt has been duly canceled by the registrar.

11. The wording of receipts must not be altered so as to limit liability.

12. Owners and managers of elevators shall furnish statements upon call from the directors of the Chamber of Commerce.

It will easily be seen, from what has been said so far, how many and how strong are the safeguards that hedge round these receipts, and what great care and thought has been spent in making these safeguards what they are.

The process, then, of obtaining a terminal elevator receipt is as follows:

On arrival of a carload of grain at the elevator, the contents are inspected by an official inspector, appointed by the state, and under bonds. The inspector makes a separate report to the Chamber of Commerce.

The grain is then weighed and the amount reported in bushels by a weighmaster, also appointed by the state, and also under bonds. He, too, makes a separate report to the Chamber of Commerce.

On the grain being stored and the railway charges paid as aforesaid, the elevator manager issues to the owner of the grain a receipt giving all details of amount in bushels, kind of grain and grade, and so forth. This receipt is presented to the registrar of the Chamber of Commerce for registration, and its figures are compared with those of the inspector and weighmaster, as above; then, if the agreement is perfect, and not else, the receipt is stamped across its face "registered," and at once becomes negotiable and passes by endorsement from hand to hand as readily as a check or note. These receipts are chiefly used as collateral in handling the large stocks of grain carried in elevators during the crop movement; and it can easily be seen how important it is that everything about them should be perfectly trustworthy. That it is so under the present system is proved by the fact, which will bear repeating, that no dispute has ever arisen about a single one of these receipts.

When these receipts are pledged as security for a loan, the borrower must promise to maintain the value of the security at ten per cent above the face of the loan. If he fails to do so in a falling market, the holder may sell and

apply the proceeds. In the case of loans against grain, made by parties not living in Minneapolis, it is usual to deposit the receipts in trust with a bank in that city. As the Minneapolis banks are accustomed to holding large quantities of this kind of security for their own loans, the margin is easily looked after, and thus time is saved if necessity arises. Yet it is seldom that the Minneapolis banks have to call on borrowers to furnish more collateral in the case of a falling market, because it is done by the elevator companies themselves, as they have become so used to the system.

## THE CO-OPERATIVES

The Farmers' Elevator Co. at Aneta, N. D., netted a loss of over \$1,100 on the business of 1905-06.

The Farmers' Elevator Co. at Brinsmade, N. D., paid a dividend of 25 per cent on last crop business.

The Farmers' Elevator Co. at Milbank, Minn., has earned over 220 per cent profits in the past eight years.

The Farmers' Elevator Co. at Fero, N. D., declared a dividend of 8 per cent on the business of last crop year.

The farmers' elevator at Bertha, Minn., paid a dividend of 38 per cent to the stockholders on the business of the crop of 1905.

The Cokato Elevator Co., Cokato, Minn., will offer its property for sale, but in the event of failure to sell at a satisfactory figure, will continue the business.

The Farmers' Elevator Co. at Pickrell, Neb., earned profits of about \$1,500 on the crop year business of 1905-06. Over 800,000 bushels of grain were handled.

The Farmers' Elevator Co. at Elgin, Man., Canada, has sold its business and elevator to B. H. Dial for \$6,500. The elevator cost the company \$9,100 six years ago.

## TEXAS FARMERS' UNION.

The Farmers' Union of Texas held a convention at Dallas in August. Among other items of business was a recommendation by the committee on grain elevators that the Union build elevators "wherever needed," the resolution upon that subject being as follows:

"That each grain district erect a sufficient number of grain elevators to handle the grain in their respective districts.

"That the state agent appoint a competent man to investigate and secure an elevator for general distribution whenever found necessary, timely and advisable.

"That this agent's association establish a grain commission composed of three competent grain growers who are members of the union, to be appointed by state agents and ratified by the association.

"That it shall be the duty of this grain commission to assist the men appointed by the state agent in securing a market and distribution of the grain grown in Texas.

"That the district and county agents inform themselves as regards breakages and losses and transportation, and to lay claims to proper authorities for damages on same."

Staples, Minn., became a wheat inspection point on September 1. Cars inspected at Staples will be made up there in trains for either Duluth or Minneapolis. On their arrival at the terminals they will be ready to distribute to the elevators immediately.

Once more in South Dakota has winter wheat scored a big success. The crop is now safely in the shock, and in some cases the thrashing has been done. One Yankton County field has thrashed out 29 bushels to the acre and another 32, while fields in the southern part of the state, which have not been thrashed, are estimated as high as 40 and 45 bushels to the acre. The berry is large and plump, which means an excellent quality and a good fat yield. Winter wheat has now passed the experimental stage in the southern part of the state. The acreage is increasing every year and the demand for South Dakota raised winter wheat for seed purposes is very heavy. The winter wheat belt is creeping northward every year, and farmers who have before made an experiment in winter wheat are this year making arrangements to secure some seed and make a start.—Sioux Falls Argus, July 31.



## FIRES--CASUALTIES

H. A. Klyce's elevator and mill at Dyersburg, Tenn., was burned recently at a loss of \$125,000.

A fire which started in the engine room and corn cribs recently destroyed the elevator at Guernsey, Iowa.

A. T. Robinson lost his elevator in a fire at Bowdon, N. D., recently, causing a loss of about \$1,400. The building was not in use.

The shuck house of the Hardy Grain Co. at Union City, Tenn., was destroyed by fire on the night of September 3, causing a loss of several hundred dollars.

In a wind and rain storm on the afternoon of August 15, the roof of the Minneapolis & Northwestern grain elevator at Kelso, N. D., was blown away.

Tramps are supposed to have set fire to the Western Elevator, which was destroyed by fire at Canova, S. D., about 1 o'clock the morning of August 17.

Fire of incendiary origin was discovered in the St. Claire Elevator at Mt. Auburn, Iowa, about 4:30 o'clock, on the morning of September 3, but no serious damage was done.

An incendiary attempted to burn an elevator at La Porte City, Iowa, owned by Husman & Son, on the night of August 24. Oiled waste, placed under a door, was found by the firemen.

An old elevator at Mapleton, Iowa, was burned down on September 7, and sparks ignited the Spotts Elevator and the Mapleton mill, but the firemen successfully checked the flames.

The hopper scales in the Diller Farmers' Grain Co.'s Elevator of Beatrice, Neb., gave way on August 2, while loaded with about 400 bushels of wheat, and fell through the floor into the pit.

Fire destroyed the Occident Elevator at Berea, N. D., on September 5, together with 6,000 bushels of wheat and 800 bushels of barley. The building had a capacity of 30,000 bushels and will be rebuilt at once.

The Farmers' Co-operative Warehouse at Battle Lake, Minn., was burned on August 13, and about 2,000 bushels of grain were destroyed. It is understood the loss was total, as the insurance had been allowed to lapse.

McEwan Bros.' Elevator at Freeland Park, Ind., narrowly escaped being gutted by fire August 31. The engine room and cob house were burned but a bucket brigade saved the main building. The origin of the fire is a mystery.

Lightning struck the elevator at Pratt Station, near Owatonna, Minn., the evening of September 1, tearing off a portion of the roof and starting a blaze. The heavy rain, however, put out the fire and saved the building from destruction.

During a storm on August 8 lightning struck the top of the Monarch Elevator at Appleton, Minn., and set fire to it in three places. Carl Sallen, the manager, succeeded in extinguishing the fire and very little damage was done.

G. Leweke's elevator and feed mill at Hopkins, Mich., burned to the ground August 14. Fire was discovered shortly after a freight train on the Lake Shore & Michigan Southern left the yards. The loss is \$7,000 and the insurance \$3,000.

During a storm on the night of August 11, fifty men, women and children were congregated in a new grain elevator at Foraker, Okla., which was struck by lightning, but none was seriously injured. The wind demolished several small buildings.

The grain elevators of Westervelt, Ill., were destroyed by fire recently, entailing a loss of about \$20,000. Bucket brigades were unable to cope with the flames, which are believed to have been started by an incendiary. Middleworth & Donnell are the owners and were insured for \$8,000.

A frame warehouse, 150x50 feet in size and three stories high, which was owned by C. M. Butler at Little Rock, Ark., was burned down early the morning of August 12. The building was leased by Gosnell & Reaves and was filled with hay and grain, all of which was lost. The state militia used a part of the building for the storing of munition and when the flames reached this part many pounds of powder and quantities of cartridges were exploded, but no one was in-

jured by them. J. Massey was overcome by the heat while fighting the fire. The loss on the building is \$1,500, while that on the contents has not been estimated.

On August 8 the elevator of Louis Lautzenheiser of Louisville, Ohio, was totally destroyed by fire. It was insured for \$7,000, about half of the loss. More than 7,000 bushels of wheat were destroyed. A hot box is stated to have been the cause.

Marsh Kelly's elevator at Hiawatha, Kan., burned on August 19, together with 5,000 bushels of wheat and several thousand bushels of corn. The building was almost full of grain at the time. The loss will reach \$12,000. There was \$9,000 insurance.

The Minneapolis and Northern Elevator at Malory, Minn., was completely destroyed by fire recently. The elevator has been closed since January and was not in use. The loss is estimated at \$9,000, partly insured, and cause of the fire is attributed to tramps.

An incendiary is believed to have been responsible for the destruction of the Farmers' Elevator at Redwood Falls, Minn., the morning of September 10. About 5,000 bushels of grain were burned, causing a loss of \$7,000, with but \$4,000 insurance.

Fire of unknown origin destroyed Charles J. Reikert's grain elevator at Raymond, Ind., just west of Oxford, Ohio, during the night of August 10. A large quantity of wheat and corn was lost. The loss is about \$12,000, with insurance aggregating \$5,000.

During a recent storm the Ellisbie Elevator at Stephen, Minn., was struck by lightning and considerably damaged. The lightning struck the building near the top and passed down one side, shattering the wall and tearing things up generally. No one was injured.

A fire, supposed to have had its origin in an overheated shafting, destroyed the plant of the Sloan Elevator Co. at Sloan, Iowa, on August 16. The owners, Hendee & Hall, figure their loss at \$11,500, with \$6,500 insurance. It is not yet fully decided as to rebuilding.

Fire started in the two-story wooden building at 652 Centre Street, Jamaica Plain, Boston, Mass., at 10:45 o'clock on the morning of August 31, and caused a loss estimated at \$1,000. The building was occupied as a grain store by William C. McLaughlin & Co. The origin is unknown.

The elevator owned by the William Pollock Milling & Elevator Co. at Hawk Point, Mo., split in two on August 11, and spilled 1,000 bushels of wheat over the Burlington right-of-way. William Pollock and W. W. Pollock of Mexico, Mo., are the principal owners of the company.

Fire destroyed the Hayes-Eames Elevator Co.'s plant at Rockford, Neb., the night of August 6, entailing a loss of about \$10,000. Three thousand bushels of wheat, corn and oats were consumed. The fire started in the roof, and is supposed to have originated from the sparks of a locomotive.

Dowd's elevator and flour mill at Quyon, Que., were destroyed by fire the morning of September 3, because of defective electrical apparatus. The loss exceeds \$75,000 and comes as a severe blow because of a fire, which recently destroyed the company's elevator at Parkenham, Ont., from an alleged similar cause.

The elevator building of the Hoffman Grain Co. at Arlington, Kan., burned on August 14. The loss is about \$5,000 with some insurance. There were about 1,000 bushels of wheat burned besides a car of flour. It is understood that the structure will be rebuilt. The cause of the fire could not be discovered.

A fire caused by an explosion in an adjoining building on August 15 caused the Sperry Flour Co., of San Jose, Cal., a loss of about \$10,000, when their elevator was badly gutted. Two hundred and fifty tons of grain, valued at \$7,500, was destroyed with the elevator, corn cribs, grain office and machinery stored in that section of the warehouse which was burned. The loss is almost fully covered by insurance.

What appears to have been a well-planned conspiracy to burn several elevators in Iowa is seen in the fires which occurred at Vinton on the night of September 3. The old Chadbourne Elevator, operated by W. A. Bryant & Sons of Cedar Falls, was completely destroyed at a loss of \$7,000 on the building and large stock of grain, with but \$3,000 insurance. While the fire was burning flames broke out in the Bickel Elevator across the street and firemen hurried to the scene to discover a pile of oily waste and paper under one corner of the struc-

ture. At Mount Auburn and La Porte two fires of incendiary origin, started in almost the same way and within the week, give color to the belief of a conspiracy, although the motive is not clear.

J. H. Hans lost between \$6,000 and \$7,000, a fire of unknown origin having destroyed his elevator at Altura, Minn., recently. About 5,000 bushels of barley were consumed and some other grain. The entire populace turned out and fought the blaze with buckets of water. Mr. Hans was only partly insured.

A fire, which appears to have been of incendiary origin, damaged the Woodward Elevator Co.'s plant at Hallock, Minn., on the morning of September 9. No damage was done to the bins, as the fire burned only as far up as the bottom of the large bins and then spread under the whole bottom of the elevator.

The Eagle Roller Mill's elevator at Madison, Minn., was badly damaged by lightning the afternoon of August 8. The lightning seemed to have gone down the southeast corner and caused an explosion in the dust which blew off the top of the building. The damage was estimated at about \$1,500 and was covered by insurance.

Two elevators at Dolton, S. D., were totally destroyed by fire on August 29, the loss being estimated in excess of \$7,000. The grain loss was 1,200 bushels of wheat and 1,800 bushels of oats. The loss is covered only partially by insurance. The fire originated in a hay mow in one of the elevators, but no cause can be assigned for the starting of the blaze.

A fire starting from spontaneous combustion at Belmore, Ohio, destroyed the elevator and cob mill on the morning of August 25, causing a loss to Churchill & Co., of Toledo, of between \$50,000 and \$60,000. Several of the employees had a narrow escape. The elevator was valued at \$35,000, and contained 18,000 bushels of oats, 850 bushels of wheat and 250 bushels of corn.

While superintending the work of constructing the Davenport Elevator Co.'s new house Henry Hansen, traveling auditor for that company at Luverne, Minn., fell from the staging on which he was working to the bin floor below, a distance of twenty feet. He fell head foremost, fracturing his left arm below the elbow and dislocating the bones of his right hand, besides being cut.

Between 16,000 and 20,000 bushels of oats stored in the grain elevator forming the east wing of the Cottingham & Franklin flour mill at Deshler, Ohio, were dumped upon the ground on August 4, when the east and north walls gave way. Men and boys joined in carting the grain in baskets, boxes and barrels to freight cars standing near and thus prevented a loss of more than \$500. They are rebuilding.

A defective journal was the cause of a fire in the Martin Elevator at Minneapolis, Minn., on the morning of August 18. The fire was confined to the top of the elevator, but did considerable damage before the firemen gained control, as it was with difficulty that they reached the seat of the fire inside of one of the bins. The loss will amount to about \$1,000, mostly by water, fully covered by insurance.

## OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

J. A. Bock, Argos, Ind.  
A. C. Barron, Imbler, Ore.  
J. M. Maguire, Campus, Ill.  
E. J. Brown, Crewe, England.  
J. B. Turnbull, Rockdale, Wis.  
F. A. McKenzie, Quincy, Mich.  
Walter Brown, Dublin, Ireland.  
F. D. Wolfrom, San Francisco, Cal.  
J. A. Brown, Christchurch, New Zealand.  
G. M. Robinson, president Charter Gas Engine Co., Sterling, Ill.  
L. M. Estabrook, U. S. Department of Agriculture, Washington, D. C.

The first important movement of this season's wheat crop from Manitoba commenced on the C. P. R. Ry., on September 4. Some carloads had previously been received, but the season's operations may be said to have begun on the date named with 14 carloads received for transportation to Fort William.



## ON ORGANIZATION.

[A paper by E. M. Wasmuth, President of the Indiana Grain Dealers' Association, read to the Grain Dealers' National Association at Chicago.]

The idea of organization was not recently conceived. It began with the creation and its history is the story of progress. It is not confined to human endeavor, but is exhibited even in the lower order of animals. It is an instinct that closely follows the first signs of intelligence. Indeed, that awkward, web-footed member of the feathered tribe, to which we all refer when desiring to point to a being entirely devoid of intelligence, the goose, is an organizer, and each flock chooses a leader who points the way while the others follow. Probably long before the advent of mankind upon this sphere, the ants, the bees, the birds, and almost all living creatures, had ceased to rely upon individual effort and had associated themselves together with others of their kind in swarms and flocks and droves and herds to pursue their labors with the assistance of their fellows.

The first record we have of a well defined and practical organization undertaken by man is taken from a Book which all grain men should and do read, and relates to one, Noah, who with a premonition of impending disaster, organized a family of every branch of the animal kingdom and having provided an ark, saved them from the flood. From that day, mankind has seemed to desire to pursue organization to the uttermost, building with it families, tribes, cities, villages, and nations, armies, navies, churches, schools, fraternities, and enterprises that admit every opportunity for the exertion of the energy that is within man.

We cannot but contemplate what would have occurred through the ages if there had been no effort at organization. If each individual had been content to live by his individual effort alone, without government, without seats of learning, without the added knowledge of his brothers' efforts and achievements, with only his own instinct to lead him and his own experience to guide him. Surely much, if not all, of the progress of civilization is due to organization and one need not wonder that the modern progressive and aggressive business man, like the modern scientist, scholar and statesman, looks to organization, to contact with his fellows, to the added experience, knowledge and discernment of his neighbors, which he gains by such contact, for the material with which to build for success; to the close association of his craft for mutual protection, for the gaining of ends not possible to the individual, and for the elevating of his business unto a higher plane. It is not surprising then that in this twentieth century which finds men and nations more than ever before, contemplating mutual accomplishments rather than self interests at the expense of a neighbor; it is not surprising to find the idea of organization taking root in every branch of human endeavor. We find labor in all its lines thoroughly organized, the professions likewise, and pursuits of a commercial nature closely following.

It is well that we as citizens should consider what effect these organizations are to have upon our communities and upon our national life. I do not hold, with the pessimist, that the perfection of organization means the end of the reward of effort, but rather the climax of equal opportunity. Much depends, of course, upon the nature of the organization. That which stifles competition and attempts to lay an unjust tax upon those whom it serves, is wrongful and should not be permitted, but that which permits fair competition, and seeks to create conditions which secure for its members a fair and reasonable opportunity for profit, is beneficial to all and should be encouraged. Competition that is fair is productive of industry and thrift, while that which is unfair is destructive and is injurious not alone to the competitors, but to the community in general. By no process of reasoning can it be shown that a community has been the more prosperous because of the failure of any member of that community to secure a proper reward for either labor or investment. On the contrary, prosperity, contentment and happiness, rest upon that community where each citizen prospers, and may organization hasten the time when every man shall be rewarded for his labor as he merits. In this day of the trust buster, when men are full of suspicion and are ready to vent their righteous indignation at anything which seems to afford an opportunity for combination, we find an occasional man who looks with suspicion upon organizations of tradesmen. No greater mistake could be made. By the very nature of organization, the purposes of a combination or trust are thwarted.

By organization the small dealer is protected and the central idea is the protection of the weak in their battle with the strong. The more perfect the organization, the more assurance to the little fellow that such conditions shall be maintained as will give him equal opportunity with his brother. When the full intent of organization is accomplished, there will be no opportunity left for the exercise of the purposes of the so-called trusts. We can, therefore, be assured that associations and organizations of tradesmen which are honestly conceived and managed in a spirit of fairness, are wholesome and worthy the approval and assistance of well meaning citizens.

Then let us see whether it really pays us individually to sacrifice the time and incur the expense necessary to join in such organization. There are several sides to it, each one of which makes it worth while. There is an educational side, a social side, and a mutual protection side.

There is no school where we can learn how to buy, grade, handle and market grain. We must secure what knowledge we get largely through experience. The only tutoring we get comes through the people with whom we come in contact in our

daily business transactions, and the wise grain man seeks every opportunity for contact with his fellow dealer and with those to whom he sells or of whom he buys, absorbing all the information he can secure for the improvement of his business methods. There are wise men in the grain business, but none so wise that they can remain continually in their offices, relying solely upon their own experience and learn all there is to learn.

The meetings of the national, state and local associations where the dealer meets his neighbor, broker or customer, beget a friendly relationship which adds much to the pleasure of the business, and if you are seeking for success in business, you must find pleasure in it first. Friendliness is a valuable asset for any business and should be exhibited to customers and competitors alike. It is fostered by association, but between competitors it dies quickly if not given plenty of exercise.

Then, there is the mutual protection side of organization; the combined effort to ward off the evils and smooth up the rough spots that attach themselves to the trade. This is the primary object of all organization. Here is where the opportunity is presented for the correction of abuses and the bettering of trade conditions. Here is where the strong should aid the weak and should be able to look past their individual needs to the general good. When the strong take control of the organization and disregard the needs of their weaker brothers, then will commence the fall of the organization. Let me say that it is the little country dealer who needs the organization and whom the organization needs. It is not the one whose volume of business puts him in a position to dictate terms to a transportation company, who really needs the organization. If the control falls in the hands of such dealers, they must not forget that success depends upon the support of the multitude of small dealers. In their better position they must not forget the needs of their less fortunate brother. There is no room for selfishness in any association. If this organization can be found at all times striving for the improvement of market conditions, for proper preparation of grain for market, for the faithful fulfillment of contracts, for the elimination of bad practices of all kinds among individual shippers and receivers, for a reasonable adjustment of railroad rates, for fair distribution of equipment by railroad companies, and for a square deal on every hand, there will be no question as to its success.

There is a wide scope of opportunity for usefulness presented to this organization. There is continually being proposed, by legislative bodies, laws that affect our business and the watchfulness of a corps of efficient officers to safeguard our interests is needed. The transportation companies and their traffic associations are continually making new rules and these need our combined efforts in order that we may maintain our rights. The recent repeated efforts to foist upon us the non-negotiable bill of lading is a case in point. That there is discrimination in railroad rates and that railroad officials pay little, if any, attention to fairness in distribution of equipment cannot be denied. The people are aroused about these matters and if the laws recently enacted are not found adequate others will be passed until the services of transportation companies shall be available to all without discrimination. It should be the part of this and kindred organizations to use their influence in a conservative manner to this end. Grain dealers are vitally interested in this question and should use every effort possible to have it settled. The time should speedily come that when a rate of freight is named, it shall be based upon the amount of energy required to carry the commodity to its destination, with a reasonable allowance for responsibility based upon the value and nature of the commodity, but with absolutely no favoritism to locality, and no influence from consignee or consignor. Commercialism in this day has in fact come to such a degree of aggressiveness that the business that does not take its stand and boldly look after its own interests, is likely to be trampled upon.

We have also many abuses that need correcting before the transacting of business between the shipper and receiver can be considered altogether satisfactory.

Terminal market conditions are not by any means the best. We need one thing in one market and something else in another and some improvements are needed in all of them. We have talked for years and are still talking of uniform grades and trade rules. These are matters of great importance to every shipper. If we get the rules of trade and the grades of grain uniform in all markets, within three or four years from now, the ultimate gain to our membership will be worth all the time we have put into association work. We will not get them until we have a national organization that can compel them.

We need some things at the other end of the line also. We need better weighing, cleaning and handling facilities, and the very fact that, since the country grain dealers have become organized, much improvement has been made in this direction, insures to us that by the continuation of such organization, more improvement will come.

The rules of arbitration and the work of the arbitration committee are much more important than many dealers realize. The idea of arbitration and investigation is having a deterrent effect upon both shippers and receivers who have been inclined to sharp practices or to carelessness in the fulfillment of contracts.

All this usefulness is open to us and all this good can be accomplished, but not by a few working overtime. The few can talk and see bright visions, but the discourse will be all platitudes and the visions will fail to materialize unless the country shipper and the receiver alike reach in their pockets and dig up the necessary coin and then roll up their sleeves and go to work.

The work rests largely upon the officers, but the membership can assist greatly by promptly meeting the demand for dues, attending the meetings, and seeking new members. While they should be ever ready to make reasonable suggestions to the officers, they should support the action of such officers at all times. Dissensions should be absolutely avoided. Is it worth while quarreling about whether the dues shall be three, five or ten dollars? Or is it important to the membership whether the members are affiliated or direct? These may be questions which, with others, must be carefully considered by the managers, but when they have decided upon a policy, let all differences be forgotten and all join heartily in an effort for the common good.

## WHEN THE INDIAN DROUGHT WAS BROKEN.

On September 11, 1905, the long drought in the wheat country of northern and northwestern India was broken by soaking rains, which fell generally over the Punjab, the Central and United Provinces, Rajputana, etc. The event was important commercially, and also from another point of view, as appears from the following extracts from the "Civil and Military Gazette," reprinted by the "Corn Trade News" of Liverpool:

"We have remarked upon the unexpectedness of the present rainfall in the Punjab. 'Unexpectedness' is hardly a strong enough word. Less than twenty-four hours before the downpour began everybody was confident that the prospect of rain was as remote as ever. There was nothing in sky or earth to suggest rain. The heat in Lahore was abnormally intense, 110 degrees in the shade, to the extent of breaking all known records for the month of September; but it was a dry heat. The air was charged with dust which cannot co-exist with atmospheric moisture. The last dust-storm had hardly died down. The official meteorological reports were without hope. From the remote southern Indian Ocean right away to the Himalayas, the weather bulletins indicated by convincing charts that rain was not even distantly on its way to the drought-parched Punjab. Indeed, on the very day the great rain clouds were slowly gathering force above our heads there arrived from Simla the daily forecast, which, while telling of probable rain in Burma and other super-saturated corners of the continent, remained darkly silent touching the Punjab.

"And now, with a suddenness so dramatic that people can talk of nothing else, there has descended upon us, not noisily or blusteringly, but softly and silently, with no murmur of thunder and with no gust of wind, as if it came from nowhere, such a flood-like downpour that in twenty-four hours the fall has exceeded all the previous monsoon showers combined. How the phenomenon is to be explained those who understand these things may tell. We have received on the subject the following undoubtedly bona fide letter from a Mohammedan gentleman who is personally known to us:

"The age of miracles is not passed! Strange beyond all imaginings are the ways of the great God! In compliance with a notification circulated in the streets by beat of drum on Saturday, an enormous crowd of earnest Mohammedans from the teeming city of Lahore gathered on Sunday morning on the immense maidan, near Lahore Fort, and with bare heads and from the bottom of their hearts offered soulful, heaven-moving prayers without intermission for two passionate hours for speedy rain. Let Allah be ever praised! The prayers were conducted by Maulvi Abdul Waheed, a holy man of God. I speak the truth. On the selfsame day, at evening, the rain began to fall in Lahore and it continued to descend in torrents during the whole night and practically all Monday.

"Who is like unto God? This wondrous rain will most certainly revolutionize the agricultural condition of the season for the Punjab zamindars and will be in ample time for sowings for cold weather crops, especially including wheat. Only a few days ago the unforeseeing and unprayerful banias raised the price of wheat to Rs. 3 per maund. God is just! Travelers from Jullundur and Gujranwalla experienced heavy rain on Sunday. Wonderful are the works of Allah! My words are not false. I give my name to it: Hakim Ali."

Yankton, S. D., reports from a farm three miles east a sample hill of corn. The longest stalk on the hill is 15 feet 3 inches from the point it leaves the ground to its tip. There are three stalks in the hill and each has two ears upon it. The distance from the ground to the base of the lowest ear is 8 feet 6 inches and it is necessary to use a step-ladder to reach it. The length of the largest ear on each stalk is respectively 14, 15 and 17 inches. There are eighty acres like this.



## LATE PATENTS

Issued on August 7, 1906

Grain Sack Tie.—Walter T. Oxley, Doran, Minn. Filed December 18, 1905. No. 828,240.

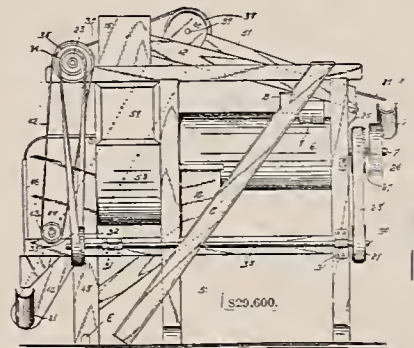
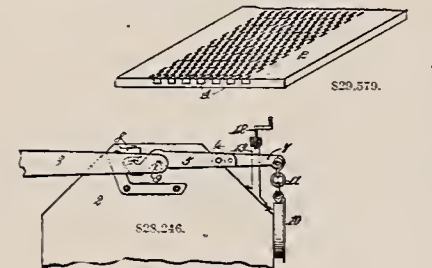
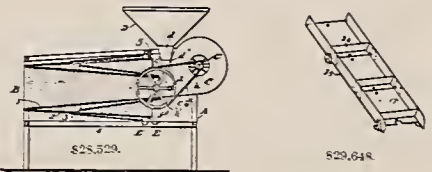
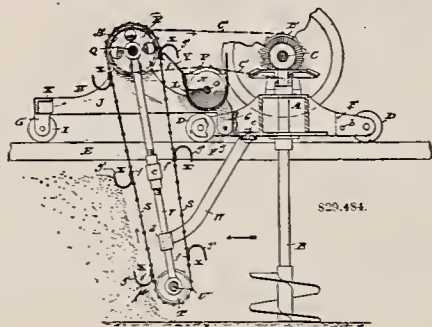
Weighing Machine.—Henry Richardson, New York, N. Y. Filed November 23, 1905. No. 828,246. See cut.

Issued on August 14, 1906.

Rotary Grain Separator.—William A. Brewster, Edmonton, Canada. Filed May 11, 1905. No. 828,529. See cut.

Grain Treating Apparatus.—Harry J. Caldwell and James R. Barr, Earl Park, Ind. Filed July 9, 1904. No. 828,531. See cut.

Indicating and Warning Attachment for Grain Bins.—David H. Houston, Hunter, N. D.; Annie L. Houston, administratrix of said David H. Houston,



To effectively secure this a sample market must be provided at a milling center, for instance, Winnipeg. A sample market is one where a sample of a car is drawn and bids invited from all the millers and shippers on the merits of the grain, not on its grade, the car not to be unloaded until a sale has been effected.

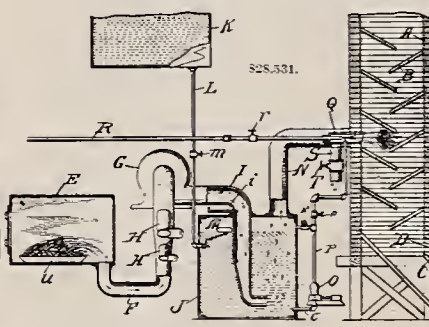
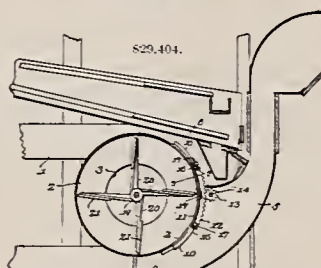
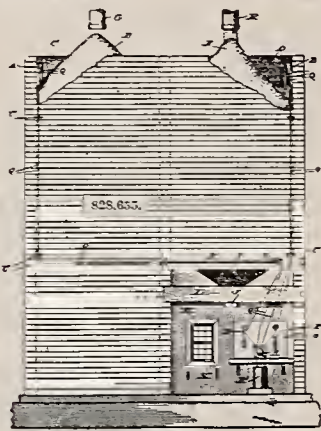
[Circular to Iowa Dealers.]

### DELAYED INSPECTION AND TRACK BIDS.

BY GEO. A. WELLS, SECRETARY.

Certain track bidders make use of the following clause in their card bid contracts, to wit: "Cars missing grade taken on contract at market difference day unloaded." Other track bidders use the following contract, to wit: "Cars missing grade taken on contract at market difference day of arrival."

There is vast difference in the risk for the shipper as between these two contracts, especially in shipping grain that it is liable to get out of



deceased. Filed September 18, 1905. No. 828,655. See cut.

Issued on August 28, 1906.

Grain Cleaner.—Orville F. Kime, Galion, Ohio, assignor to Frank J. Prame, Shiloh, Ohio. Filed February 19, 1906. No. 829,404. See cut.

Grain Elevator.—Theodore Naus, Manitowoc, Wis., assignor to Rudolph Goetzler and Theodore Loef Sr., Manitowoc, Wis. Filed February 26, 1906. No. 829,484. See cut.

Conveyor Belt.—Ernest B. Folsom, San Francisco, Cal., assignor to one-half to Warren E. Murray, San Francisco, Cal. Filed April 5, 1906. No. 829,579. See cut.

Grain Beater and Cleaner.—Arthur A. Peters, Denver, Colo., administrator of Roland R. Gaskill, deceased. Filed August 29, 1904. No. 829,600. See cut.

Combined Conveyor and Elevator.—Adam Heim, Brownsville, Ind. Filed June 21, 1905. No. 829,648. See cut.

Issued on September 4, 1906.

Conveying System.—Hiram W. Blaisdell, Los Angeles, Cal. Filed February 1, 1904. No. 830,045. See cut.

In opening the new mill at St. Boniface, Man., recently Premier Rublin said that in order to create a proper relation of farmer and miller there must be a guarantee to the grain grower of the full value of his grain, no matter the grade or quality.

condition when there is a congestion of cars at terminals, and I would suggest that you examine your postal card contracts carefully and insist on having your grain inspected on arrival and not when unloaded.

When your grain has been discounted by the track bidder because of missing grade, check the market up carefully and see that such discount corresponds with "market value day of arrival." Bear in mind the fact that when selling on postal card bid, such postal card bid is the contract. The confirmation of such sale, if different from the card bid, does not affect the contract as shown by such card bid.

Discounts on corn, especially when inspected "day of unloading," have cost the shippers a large amount of money because of the deterioration that occurred while cars were standing in the elevator yards, the elevator company or buyer being responsible for such delay. When cars have evidently been delayed in transit, I would suggest that you ascertain whether such delay was en route or in the terminal yards.

Buckeshops continue to "do" business; also their customers. A big one closed up at New York on August 23 and "did" their customers out of the measly sum of two million dollars. There is much truth in the saying "that a sucker is born every minute and only one dies every day." Be as careful about placing your margins and trades as you would in selecting your bank.—Zahm & Co., Toledo.

## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### FEED BAGS.

Sewing twine, etc., for sale. Bottom prices.

WILLIAM ROSS & CO., 57 S. Water St., Chicago.

### GRAIN AND SEEDS

#### FOR SALE.

Canada peas, garden peas, marrowfat peas, garden beans, pigeon feed. Carloads and less. Let us know your requirements.

OGEA MAW GRAIN & SEED CO., West Branch, Mich.

#### ALFALFA HAY AND SEED.

We make a specialty of shipping alfalfa hay and alfalfa seed.

THE LAS ANIMAS WAREHOUSE, Las Animas, Colo.

### ELEVATORS AND MILLS

#### FOR SALE, RENT OR EXCHANGE.

Good mill and elevator located in fine wheat country. Favorable terms. Address

F. S. R., Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

#### MINNESOTA ELEVATORS FOR SALE.

Three desirable elevators situated on the same road in central Minnesota. Address

MINNESOTA, Box 7, care "American Elevator and Grain Trade," Chicago, Ill.

#### FOR SALE.

Modern iron clad, low drive elevator at Armstrong, Ill. With or without implement business. New ear corn crib. Thirteen horsepower gasoline engine. Address

BOX 177, Champaign, Ill.

#### FOR SALE.

Modern 20,000-bushel capacity elevator; 12-horsepower gasoline engine; dump scales. Grain receipts last year 157,000 bushels. Located in the best grain section in eastern Minnesota, on C., M. & St. P. Ry. Write

R. E. JONES CO., Wabasha, Minn.

#### FOR SALE.

Old established grain, coal and lumber business, with elevator and accessory buildings, for sale. Stock includes grain, coal, lumber, tile, lime, etc. Good reasons for selling. Twenty-six miles from Chicago on C. & N.W. Railway. Address

H. F. BATTERMAN & CO., owners, Palatine, Ill.

#### ELEVATORS FOR SALE.

In Minnesota, North Dakota and Iowa. On my list at present is a line which includes a good cleaning house. Coal is sold at each station and the property is earning a good income. For information concerning any of these houses address

H. A. WERNLI, 713 Chamber of Commerce, Minneapolis, Minn.

#### FOR SALE.

New cribbed elevator, 14,000 bushels' capacity; good coal sheds for 250 tons; corn crib for 20,000 bushels; with an acre of deeded land in good town in southern Nebraska, at \$6,500 if taken quick. For full particulars address

R. E. S., Box 8, care "American Elevator and Grain Trade," Chicago, Ill.



**ELEVATORS FOR SALE.**

By order of the United States District Court, in and for the Eastern Division of the Northern District of Illinois, at Chicago, Illinois, entered on August 13th, 1906, in the matter of GEORGE S. McREYNOLDS, BANKRUPT, each of the following properties belonging to said estate will be sold to the highest bidder:

**ELEVATOR "A," CHICAGO.**

All the shares of stock of the McReynolds Elevator Company, an Illinois Corporation, being 1,800 shares of the par value of \$100 each; capacity 1,500,000 bushels; located at Calumet River in South Chicago, subject to a bonded indebtedness of \$125,000.

**ELEVATOR "B," CHICAGO.**

Capacity 1,000,000 bushels, situated at the corner of Wood and Rebecca Streets, Chicago, Illinois; no encumbrances.

**ELEVATOR "C," EAST ST. LOUIS.**

All the shares of stock of the Southern Elevator Company, an Illinois Corporation, being 250 shares of the par value of \$100 each. The Southern Elevator Company owns the leasehold of Elevator "C," situated at East St. Louis, Illinois; capacity 1,000,000 bushels. The lease provides for annual rental of \$13,000, and expires November, 1911. The Southern Elevator Company is a public warehouse under the laws of Illinois.

Sealed bids for all or any of said properties must be filed with the Chicago Title & Trust Company Trustee, 100 Washington Street, Chicago, Illinois, on or before 9 o'clock A. M., September 17th, 1906, and will be presented in open court at 10 o'clock of said day to SIDNEY C. EASTMAN, Esquire, Referee in Bankruptcy, at his office, 905 Monadnock Building, Chicago, Illinois, for action.

A deposit of 10 per cent of the amount of the bid must accompany the bid.

For further particulars apply to

CHICAGO TITLE & TRUST COMPANY,  
Trustee,

100 Washington Street, Chicago.

ROSENTHAL, KURZ & HIRSCHL,

Attorneys,

122 Monroe Street Chicago.

RINGER, WILHARTZ & LOUER,

Attorneys,

Ft. Dearborn Bldg., Chicago.

**FOR SALE**

My elevators at Green Valley and Ruthton on the Great Northern Railway in Southwestern Minnesota. Address

WALTER PARKS, Airlie, Minn.

**\$9,000 STOCK GOODS—IMPROVEMENTS \$3,500.**

For sale, a general store, dry goods, groceries and hardware, in a good small town right in the great wheat belt. Will take some trade. Address

W. P. FINGER & SONS, Sawyer, Pratt Co., Kan.

**MACHINERY****FOR SALE.**

I have a quantity of second-hand elevator material, consisting of pulleys, belting, cups and a Sterling Loader, for sale cheap. For particulars, Address

CHARLES L. SMITH, Hopedale, Ill.

**FOR SALE.**

One 60-horsepower slide-valve engine, with automatic cut-off governor. This machine is in fine condition. For price and particulars write to

FROEDTERT BROS. GRAIN AND MALTING CO., Milwaukee, Wis.

**FOR SALE.**

Gasoline engines; one 54-horse Fairbanks-Morse; one 28, one 16, one 12, 2, 8 and 25 horsepower Sterling Charter. All sizes and prices in small sizes.

A. H. McDONALD, 38 W. Randolph St., Chicago.

**FOR SALE.**

One No. 2 Barnard's Improved Double Screen Corn Cleaner, 500 to 700 bushels' capacity. Thoroughly refitted, practically as good as new. Low price.

W. H. CALDWELL, 303 and 304 Western Union Bldg., Chicago, Ill.

**FOR SALE.**

One Houston Stanwood-Gamble engine, 14x20, 60 horsepower.

One boiler, 120 horsepower, 74-4-inch flues.

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One boiler feed heater.

One smokestack.

One fire front, grate bars.

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[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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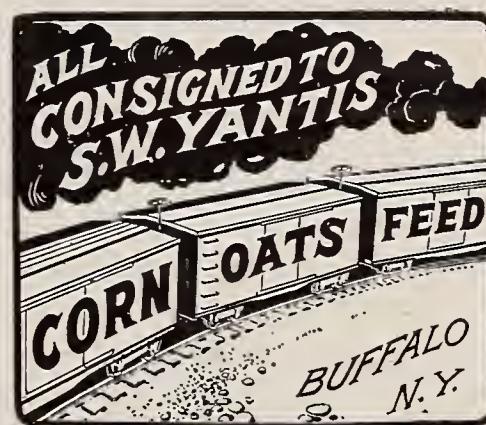
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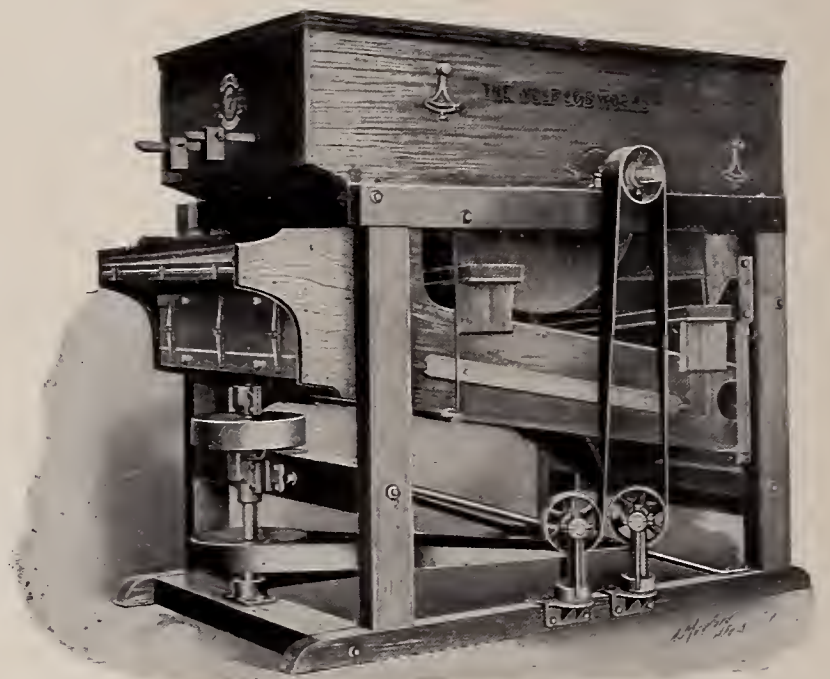
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<b>HUTCHINSON:</b>	Kansas Grain Co., Terminal Elevator.
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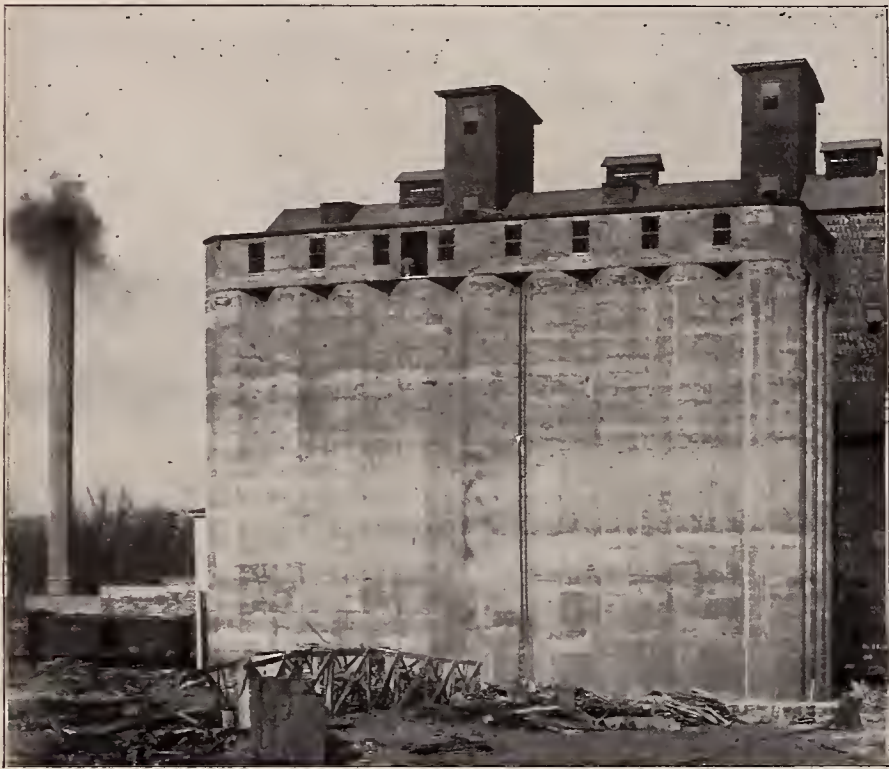
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Superior Terminal, Superior,	2,500,000	Interstate Elevator, Minneapolis,	1,000,000
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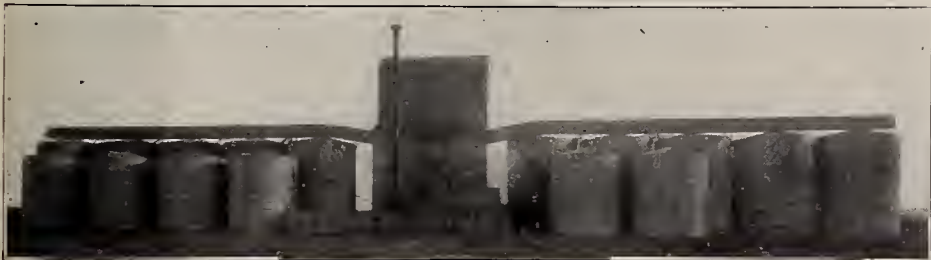
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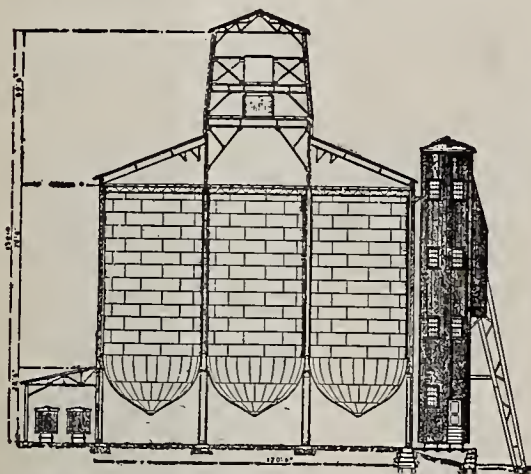
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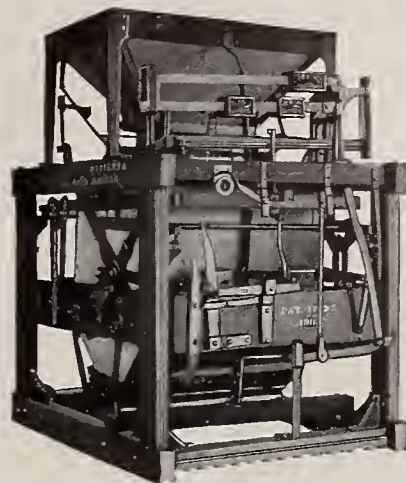
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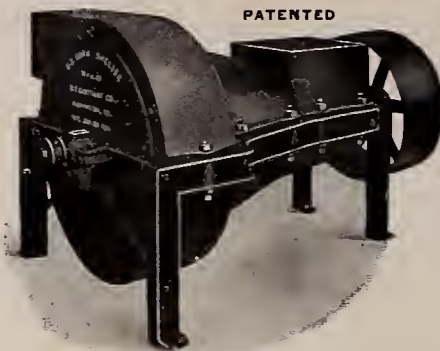
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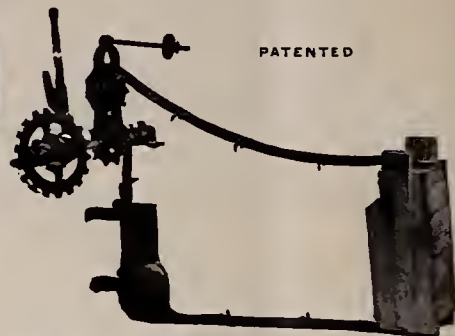
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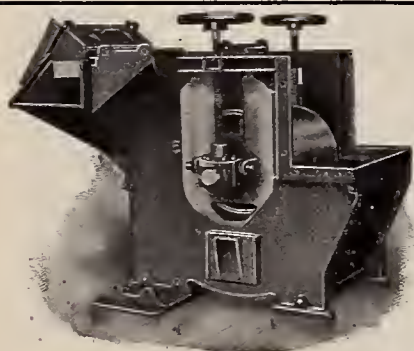
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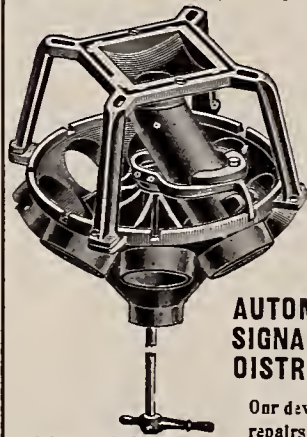
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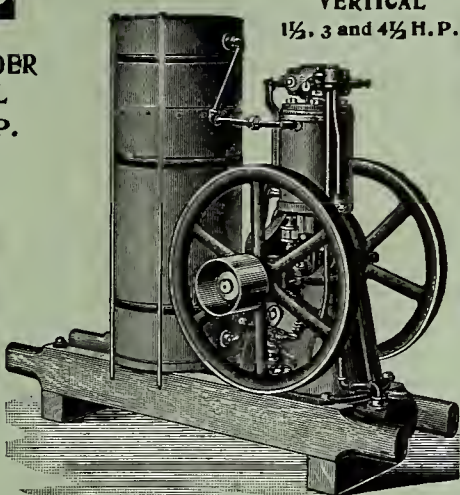


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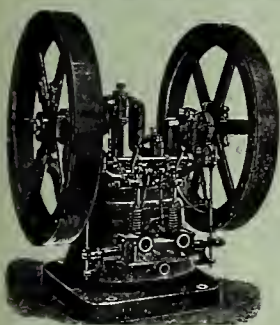
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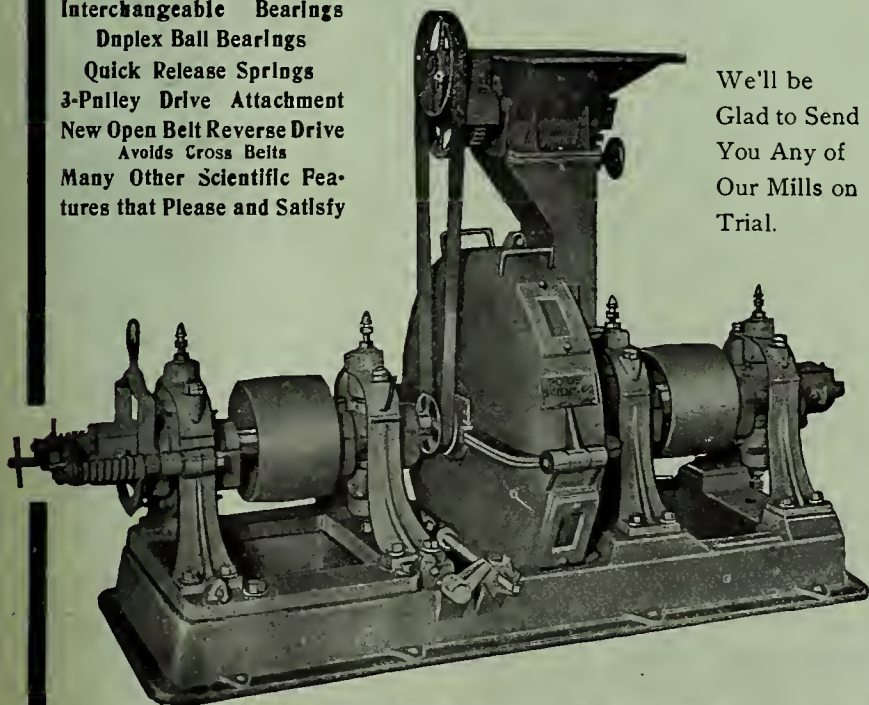
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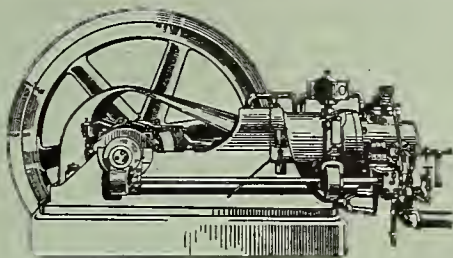
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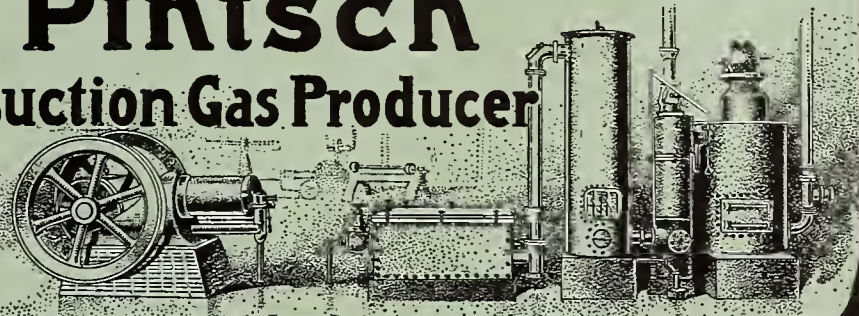
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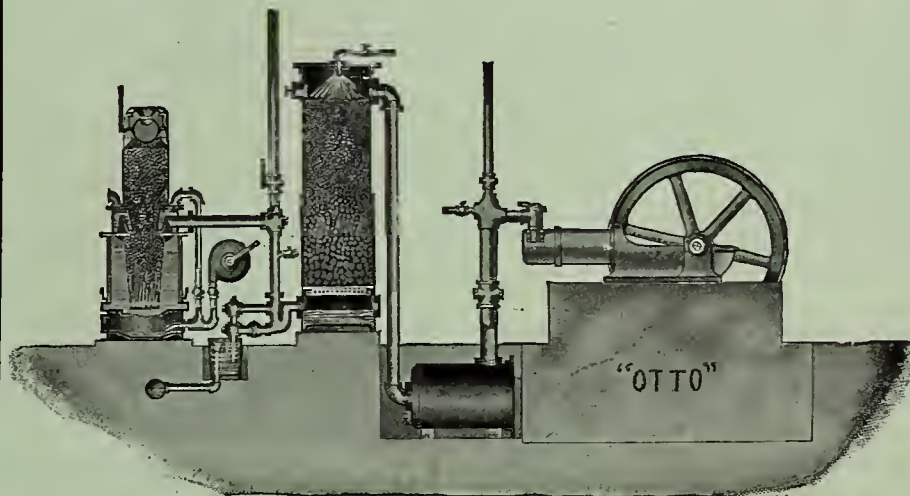
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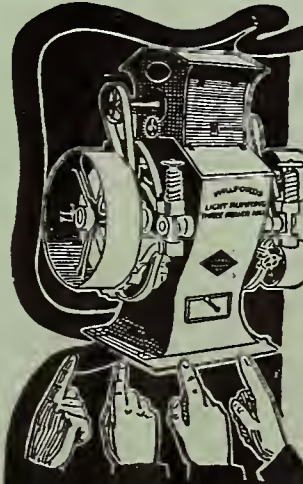
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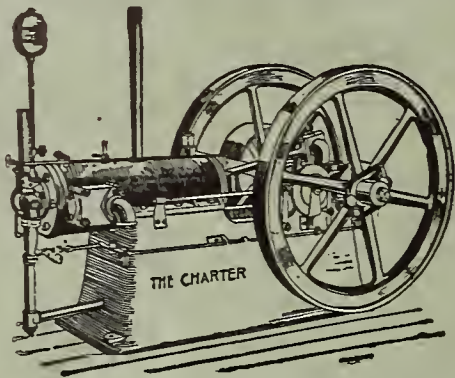
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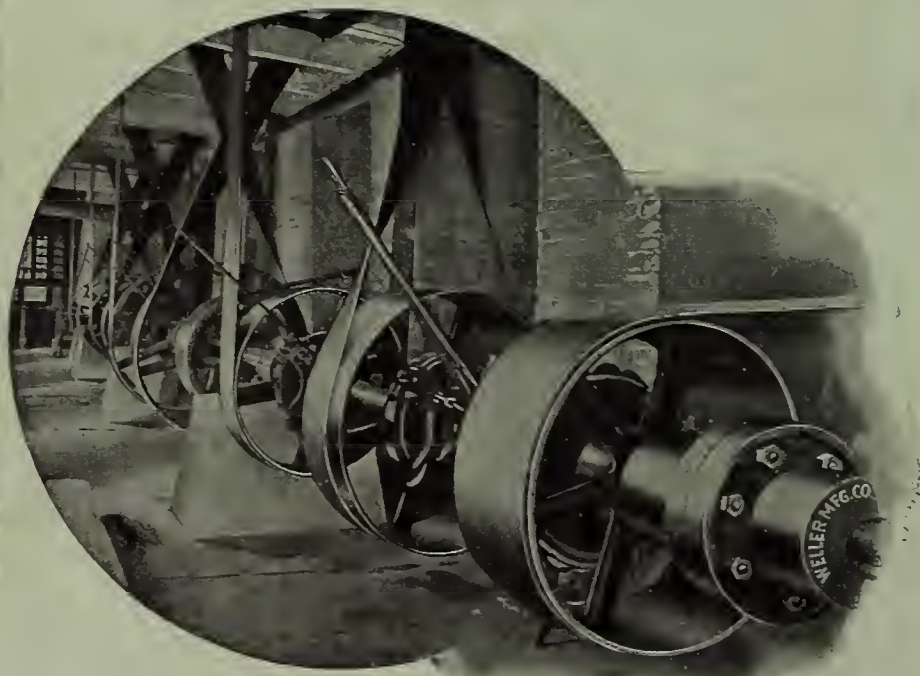
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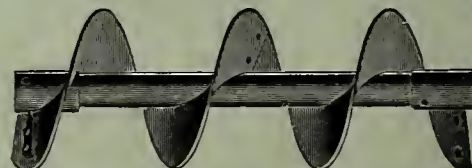


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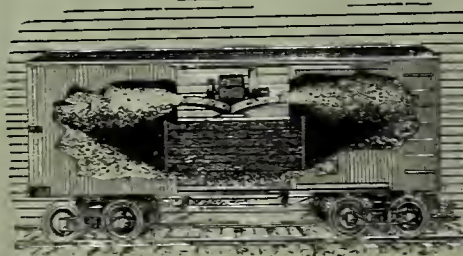
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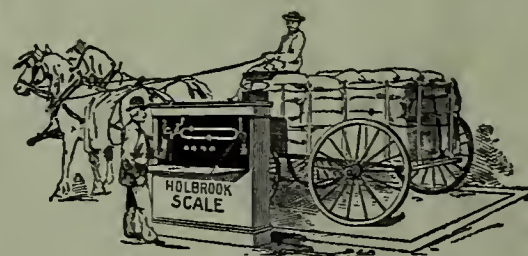
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